New Graduate Registered Nurse Practice Readiness for Australian Healthcare Contexts:
A Collective Instrumental Case Study

Thesis submitted by

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The contributions of others are outlined in the table below. The table identifies the extent and nature of the collaboration with individuals throughout the research process

Nature of assistance	Contribution	Name and affiliation
Intellectual support	Proposal writing Research design Research process Data analysis Thesis writing Publication preparation Conference presentation	Professor Jane Mills College of Health-Te Kura Hauora Tangata, Massey University Professor Melanie Birks College of Healthcare Sciences James Cook University Associate Professor Richard Franklin College of Public Health, Medical & Vet Sciences, James Cook University
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Gratitude is not only the greatest of virtues, but the parent of all the others

Marcus Tullius Cicero

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Abstract

For new graduate registered nurses (NGRNs) practice readiness, or the ability to enter the healthcare setting and practice competently as a registered nurse (RN) is essential for safe patient care and meeting the needs of healthcare providers (individuals and institutions) (HCPs). A NGRN's level of practice readiness can affect transition to the RN role, retention rates and patient safety. Studies aimed at exploring the preparation and transition of NGRNs from student to RN suggest that NGRNs are not 'practice ready'. Researchers that have investigated the concept of practice readiness describe it as a multidimensional concept that is poorly defined and shaped by context. Researchers examining the practice readiness of Australian NGRNs have focussed on specific geographic areas and healthcare contexts; undergraduate nurses (UGNs); or involved graduates from other professions. Minimal research has been undertaken to explore the perspectives of healthcare professionals working with NGRNs in Australian healthcare settings across diverse geographic locations.

While growing evidence implies that NGRNs are not practice ready, a common understanding of NGRN practice readiness and how practice readiness is achieved, measured and determined remains unclear and variable. As a result, inconsistencies in expectations exist between HCPs, NGRNs and education providers. Such inconsistencies can lead to NGRNs having difficulty meeting HCPs' expectations, adjusting to their new role and providing a safe standard of care.

Using a multiple case study approach, the concept of NGRN practice readiness from the perspective of healthcare professionals in Queensland, Australia is explored. Four case studies of healthcare institutions in four different geographic locations were completed. Constructivism and symbolic interactionism were used as the theoretical framework to help explain how individual HCP's perception, context and practice intersect to conceptualise descriptions and meanings of NGRN practice readiness. Methods employed for data generation and collection included individual and focus group interviews; document review; field notes; and memos. Individual and cross-case analyses were conducted using selected grounded theory methods of coding and categorising of data; concurrent data collection and analysis; constant comparative analysis; and memo writing. Data from each case were integrated and interpreted against the research questions to provide an in-depth understanding of NGRN practice readiness.

The cross-case analysis identified four major categories: *Dominance of context; Determining practice readiness; Defining practice readiness; and Developing practice readiness.* The findings highlight how decisions about practice readiness are informed by HCP's personal and professional context. Practice readiness is defined as a multidimensional concept encompassing personal, clinical, industry and professional capabilities. Findings indicate that acquiring the required level of practice readiness relies on factors present in a NGRN's pre- and post-registration education and clinical experiences and occurs across a 4-year continuum of learning that includes a NGRN's first year of practice, where the NGRN makes the final transition from student to professional RN. Recommendations from this study will inform policies and practices that aim to improve NGRN practice readiness and consequently their transition, integration and retention in the healthcare workforce.

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Abbreviations and Acronyms

ACSQHC	Australian Commission on Safety and Quality in Health Care
ABS	Australian Bureau of Statistics
ACN	Australian College of Nursing
ADL	Activities of Daily Living
AGDOH	Australian Government Department of Health
AH	Allied Health
AHPRA	Australian Health Professional Regulation Authority
AIHW	Australian Institute of Health and Welfare
AIN	Assistant in Nursing
ANMAC	Australian Nursing and Midwifery Accreditation Council
ANMF	Australian Nursing and Midwifery Federation
APMRC	Australian Population and Migration Research Centre
AQF	Australian Qualifications Framework Council
ARIA	Accessibility/Remoteness Index in Australia
ASGC	Australian Standard Geographic Classification
ARC	Australian Research Council
BN	Bachelor of Nursing
CGQ	Centre for the Government of Queensland
CHD	Coronary Heart Disease
CN	Clinical Nurse
CNC	Clinical Nurse Consultant
CVD	Cardiovascular disease
DH	Department Head
DON	Director of Nursing
DWS	Districts of Workforce Shortage
ECRN	Early-career registered nurse
ED	Emergency Department
EDMS	Executive Director Medical Services
EDNMS	Executive Director Nursing Midwifery Services
EN	Enrolled Nurse
ERS	Environmental Reality Shock
FM	Facility Manager
FTE	Full-time equivalent
GDP	Gross Domestic Product
GNTP	Graduate nurse transition program
HCP	Healthcare Provider (individual or institution)
HHS	Hospital and Health Service
HR	Human Resources

HREC	Human Research Ethics Committee
HWA	Health Workforce Australia
HWE	Healthy workplace environment
ICN	International Council of Nurses
ICU	Intensive Care Unit
IOM	Institute of Medicine (United States)
IR	Inner regional
JCU	James Cook University
LMS	Learning management system
LOR	Large outer regional
MH	Mental Health
NE	Nurse Educator
NESB	Non-English Speaking Background
NGRN	New Graduate Registered Nurse
NHHRC	National Health and Hospitals Reform Commission
NHMRC	National Health and Medical Research Council
NM	Nurse Manager
NMBA	Nursing and Midwifery Board of Australia
NP	Nurse Practitioner
NSQHS	National Safety and Quality Health Service
NUM	Nurse Unit Manager
PC	Productivity Commission
QG	Queensland Government
QG OHMR	Queensland Government Office of Health and Medical Research
QGSO	Queensland Government Statisticians Office
QH	Queensland Health
RA	Remoteness Area
RGO	Research governance office
RN	Registered Nurse
RRMA	Rural, Remote and Metropolitan Areas
SIN	Student in Nursing
SMO	Senior Medical Officer
SOR	Small outer regional
SSA	Site-specific approval
UA	Universities Australia
UGN	Undergraduate nurse
VET	Vocational Education and Training
WHO	World Health Organization
WRS	Work Readiness Scale

Clarification of Terms

Key terms and definitions relevant to this study and used in this thesis are explained in the table below to ensure congruence in meaning and understanding between the writer and reader.

<table>
<tr><th>Term</th><th>Definition</th></tr>
<tr><td>Activities of Daily Living (ADL)</td><td>The routine activities that a person usually performs every day: eating, toileting, dressing, bathing, mouth care and transferring (Harris, Nagy & Vardaxis, 2010).</td></tr>
<tr><td>Assistant in Nursing (AIN)</td><td>An individual who has completed a relevant certificate III at an accredited technical college. An AIN works under the direction and supervision of a registered nurse (RN), to support RNs and enrolled nurses (ENs) in the delivery of general patient care (Nurse in Australia, n.d.).</td></tr>
<tr><td>Australian Commission on Safety and Quality in Health Care (ACSQHC)</td><td>The body that leads and coordinates national improvements in safety and quality in healthcare across Australia (ACSQHC, 2015).</td></tr>
<tr><td>Australian Health Practitioner Regulation Agency (AHPRA)</td><td>The organisation responsible for the implementation of the National Registration and Accreditation Scheme across Australia. AHPRA supports the national boards to implement the national scheme. Established by section 23(1) of the Health Practitioner Regulation National Law (AHPRA, 2015).</td></tr>
<tr><td>Australian Statistical Geography Standard (ASGS)–Remoteness Area (RA) classification
(Australian Institute of Health and Welfare [AIHW], 2004).</td><td>The standard measure used by the Australian Bureau of Statistics (ABS) to determine five classes of Remoteness Area (RA) (ABS, 2014). These are used in this study to select the healthcare sites for investigation. The classifications are based on the Accessibility/Remoteness Index of Australia (ARIA)+, the successive index to ARIA (the geographical approach to measuring remoteness in Australia). These measure remoteness by physical road distances between populated localities and service centres in five classes with scores ranging from 0 (high accessibility) to 15 (high remoteness). The ASGS-RA classifications are:
<table>
<tr><th>Class</th><th></th><th>Description</th><th>Index range</th></tr>
<tr><td>Major cities of Australia</td><td>[MC]</td><td>Relatively unrestricted accessibility to goods and services</td><td>0–0.2</td></tr>
<tr><td>Inner regional</td><td>[IR]</td><td>Some restrictions to accessibility of some goods and services and opportunities for social interaction;</td><td>>0.2–2.4</td></tr>
<tr><td>Outer regional</td><td>[OR]</td><td>Significantly restricted accessibility of goods and services and opportunities for social interaction;</td><td>>2.4–5.92</td></tr>
<tr><td>Remote</td><td>[R]</td><td>Very restricted accessibility of goods and services</td><td>>5.92–10.53</td></tr>
<tr><td>Very remote</td><td>[VR]</td><td>Very little accessibility of goods and services</td><td>>10.53–15</td></tr>
<tr><td>Migratory*</td><td></td><td>Offshore, shipping and migratory areas</td><td></td></tr>
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</td></tr>
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Term	Definition
Clinical workforce	The nursing, medical and allied health staff that provides patient care and students who provide patient care under supervision. This may also include laboratory scientists (ACSQHC, 2012, p. 8).
Clinician	A healthcare provider trained as a health professional, including registered and non-registered practitioners or a team of health professionals providing healthcare who spend the majority of their time providing direct clinical care (ACSQHC, 2012, p. 8).
Context of practice	'The conditions that define an individual's nursing and/or midwifery practice'; these include 'The type of practice setting, the location of the practice setting, the characteristics of patients, the focus of nursing and/or midwifery activities, the degree to which practice is autonomous, and the resources that are available, including access to other healthcare professionals' (Nursing and Midwifery Board of Australia [NMBA], 2016c, p. 2)
Enrolled nurse (EN)	Person who provides nursing care under the direct or indirect supervision of a RN. They have completed the prescribed education and demonstrate competence to practice under the national law as an EN in Australia. ENs are accountable for their own practice and remain responsible to a RN for the delegated care. Supervision includes managerial, professional and clinically focused supervision (NMBA, 2016a, p. 6).
Healthcare Provider (HCP) (individual and institution)	'Any individual, institution, or agency that provides health services to health care consumers' (Harris, Nagy & Vardaxis, 2010, p. 794). A range of definitions for the terms 'healthcare provider' and 'healthcare stakeholder' exist in the literature. Definitions from health professional and government literature were considered. HCP was chosen because this term and its associated definition (Harris et al., 2010) best reflected the selection of cases and participants used in the study.
Hospital	A healthcare facility licensed by the relevant regulator as a hospital or declared as a hospital (ACSQHC, 2012, p. 10).
Hospital and Health Service (HHS)	A statutory body responsible for the administration of health services in a specific local area. Applied geographical division of Queensland selected by Queensland Health (QH) for organisational purposes to govern healthcare in Queensland. There are 16 HHSs, which are relatively self-contained with respect to hospital care (QH, 2016a).
National Competency Standards for the Registered Nurse	'The core competency standards by which your performance is assessed to obtain and retain your registration as a registered nurse in Australia'. The competency standards are 'broad and principle-based so that they are sufficiently dynamic for practising nurses and the nurse regulators to use as a benchmark to assess competence to practise in a range of settings' (NMBA, 2006, p. 1). These were superseded by the Registered nurse standards for practice (NMBA, 2016).

Term	Definition
National Safety and Quality Health Service (NSQHS) Standards	The NSQHS standards provide a nationally consistent and uniform set of measures of safety and quality for application across a wide variety of healthcare services. They propose evidence-based improvement strategies to deal with gaps between current and best practice outcomes that affect a large number of patients (ACSQHC, 2012, p. 2).
New Graduate Registered Nurse (NGRN)	A RN in their first 12 months of practice as an RN following completion of an accredited undergraduate Bachelor of Nursing Science degree program. In national and international literature, a number of terms have been used to describe individuals who have completed a nursing degree program at a university and commenced clinical practice as an RN. NGRN was chosen as this was the term most consistently used in the literature.
NGRN practice readiness	This relates to how ready a NGRN is to work as a RN in a healthcare environment (Wolff et al., 2010b). A NGRN is able to work as a novice RN in a healthcare environment and provide a basic level of safe, competent and efficient healthcare.
NGRN transition program	A program of support provided to help NGRNs attain and further develop personal and professional nursing knowledge, skills, behaviours and attributes to effectively and smoothly transfer into the healthcare team (QH, 2010, p. 11).
Non-clinical workforce	The workforce engaged in a health service organisation who do not provide direct clinical care but support the business of health service delivery through administration, hotel service and corporate record management, management support or volunteering (ACSQHC, 2012, p. 11).
Nursing and Midwifery Board of Australia (NMBA)	The national body responsible for the regulation of nurses and midwives (NMBA, 2015).
Orientation	A formal process of informing and training workforce upon entry into a position organisation, which covers the policies, processes, and procedures applicable to the organisation (ACSQHC, 2012, p. 11).
Organisational support	Refers to the input and activities from executive, committees and organisational leaders that demonstrate commitment to best practice and facilitate optimum patient care through provision of resources, staff consultation and support.
Patient	A person receiving healthcare. Synonyms for ‘patient’ include consumer and client (ACSQHC, 2012, p. 11).
Patient-centred care	The delivery of healthcare that is responsive to the needs and preferences of patients. Patient-centred care is a dimension of safety and quality. Synonyms for patient include person (ACSQHC, 2012, p. 11).

Term	Definition
Point of care	The time and location where an interaction between a patient and clinician occurs for the purpose of delivering care (ACSQHC, 2012, p. 11).
Policy	A set of principles that reflect the organisation's mission and direction. All procedures and protocols are linked to a policy statement (ACSQHC, 2012, p. 11).
Practice	Any role, remunerated or not, in which the individual uses their skills and knowledge as a health practitioner in their profession. Practice in this context is not restricted to the provision of direct clinical care; it also includes using professional knowledge (working) in a direct non-clinical relationship with clients, working in management, administration, education, research, advisory, regulatory or policy development roles, and any other roles that affect the safe, effective delivery of services in the profession (NMBA, 2016c).
Queensland Health (QH)	The government department in the state of Queensland responsible for the administration the state public health system
Registered nurse (RN)	A person who has completed the prescribed education preparation, demonstrates competence to practice and is registered under the Health Practitioner Regulation National Law as a RN in Australia. Australian Nursing and Midwifery Accreditation Council (ANMAC) (ANMAC, 2012)
Registered nurse standards for practice	The expectations of RN practice that inform the education standards and regulation of RNs, and determination of a RN's capability for practice; and guide consumers, employers and other stakeholders on what to reasonably expect from a RN regardless of the area of nursing practice or years of nursing experience (NMBA, 2016, p. 6). These replace the previous National competency standards for the registered nurse (NMBA, 2006).
Scope of practice	That in which nurses are educated, competent to perform and permitted by law. The actual scope of practice is influenced by the context in which the nurse practices, the health needs of people, the level of competence and confidence of the nurse and the policy requirements of the service provider (NMBA, 2016c, p. 6).
Student in nursing (SIN)	An undergraduate student nurse who is employed but is also studying at a recognised university
Workforce	All those people employed by a health service organisation (ACSQHC, 2012, p. 12).
Workplace environment	The overall surroundings and conditions where healthcare is being delivered, including the building, fixtures, fittings and services such as air and water supply. It can also include other patients, visitors and the workforce (ACSQHC, 2012, p. 8).

Synopsis of the Research

Title	New graduate registered nurse practice readiness for Australian healthcare contexts: A collective instrumental case study. HREC Reference number: **HREC/15/QTHS/131**
Research aim	The aim of this collective instrumental case study research was to explore the perceptions of healthcare providers (HCPs), to define new graduate registered nurse (NGRN) practice readiness from the perspective of Australian HCPs and explain the process by which a NGRN is determined to be practice ready.
Research questions	1. How do HCPs define NGRN practice readiness? 2. What factors influence how Australian HCPs perceive and determine NGRN practice readiness? 3. How do NGRNs demonstrate practice readiness? 4. How do HCPs interactions with NGRNs on NGRNs ability to demonstrate practice readiness?
Methodology	Multiple case study: Collective instrumental case study
Methods	Sites and participants • Purposeful selection and recruitment o 4 HCP groups (professionals) o 4 HCP sites (institutions) o 4 geographic locations (rural, inner and outer regional)
	Data generation and collection • Demographic questionnaire • Semi-structured interviews • Documents • Field notes • Memos
	Data analysis • Grounded theory methods: o Coding and categorising data o Constant comparative analysis o Memo writing o Storyline • Document analysis • Interim case studies • Cross-case analysis • Data management tools: o NVivo o Microsoft Excel, Word
Interpretative rigour and quality	• Quality evaluation o Product o Process • Ethical considerations • Limitations • Researcher reflexivity
Findings and recommendations	

Notations Used in the Thesis

Explicit notations are used within this thesis to facilitate the readability and understanding of the situational nature, meaning and emphasis on specific content. These are explained in the table below.

C1 C2 C3 C4	Case 1 Case 2 Case 3 Case 4	These notations will be found at the end of participant quotes and represent the case in which the HCP was associated with in the study.
P1	Participant	These notations are used at the end of participant quotes and represent the number allocated to identify the participant within the case study site where they were interviewed.
HCP	Healthcare provider (institution and individual) associated with a case	This notation will be found when referring to the healthcare professionals and facility associated with each case in which the research was undertaken.
[N] [M] [AH] [HR]	Nursing Medicine Allied Health Human Resources	These notations are used at the end of participant quotes when there is a need to distinguish and represent the healthcare professionals group that the participant belongs for this study.
[R] [SOR] [IR] [LOR]	Remote site Small outer regional site Inner regional site Large outer regional site	These notations represent the geographic location of the healthcare provider site where the study took place. These notations will be found at the end of participant quotes and in case descriptions.
Italicised text	Quotations	Used for in-text and indented participant quotations to validate information
[]	Square brackets	Inserted by the researcher to clarify information within a quote

Prologue—The Researcher in this Research

Growing up in a large family as number four of eight children and surrounded by health professionals, predominantly ‘doctors and nurses’, no doubt had an influence on my decision to become a nurse and a teacher. My father, his three brothers and his father were all doctors, and my mother, her mother and sister were all nurses. As a child, I enjoyed ‘teaching’ my brothers and sisters, who would clarify this as me ‘telling and directing’ and ‘always being right’ but was equally concerned with nurturing, caring and supporting them, keeping them out of trouble and keeping the peace.

Having known from the early age of 7 that I would be a nurse and then thinking at the age of 9 I would be a teacher, it was no surprise that on graduating from high school I applied for and was accepted into both teaching and nursing. I chose to nurse and commenced my career as a nurse, training in a children’s hospital through the apprenticeship model of nursing. On completion, I worked as an RN in different clinical contexts nationally and internationally, but predominantly as a community nurse and in metropolitan settings. My international experience was the result of a desire to travel and experience worlds outside my own that seemed so different and interesting. Using the United Kingdom (UK) as my working base, I travelled through the UK, Ireland, Europe and Africa. While working in the UK, I was presented with the opportunity to work in a hospital in a remote town in Saudi Arabia. While working closely with a culture so different to my own, with children with disabilities beyond what I had ever seen, I discovered the vast differences in how everyone understood, lived and viewed the world. I met people from all over the world and came to realise the importance and value of understanding the world from different perspectives, and the experience, knowledge and growth this can bring. This experience changed my life, how I nursed and how I went about helping others.

Returning home, I began working in the community setting. While I enjoyed acute care, being a community nurse gave me the opportunity to work with people in their world, in their reality and use their world as part of their nursing care. My most satisfying and productive nursing practice came from nursing clients who ‘I knew’. I found that in understanding them as people, knowing their needs (not my own) and working in partnership with them empowered them and enriched my life and theirs. I learned as much from them as they did from me, and sharing this with students and colleagues, friends and family along the journey

was a fulfilling endeavour. Community nursing gave me grounding in person-centred care, refined my critical thinking and decision-making capability, and gave me autonomy and responsibility in my clinical practice. It introduced me to the impact of social and emotional influences on health and the importance of team and community partnerships in healthcare. Community nursing is the most holistic nursing I have ever practised.

These experiences informed the next phase of my career: being a nurse and becoming a teacher. As my career in nursing progressed, I found I gravitated more towards learning, teaching and a desire to understand human behaviour and the world in which we live. This spurred an interest in self-development, metaphysical approaches to life and health, alternative therapies, meditation, yoga and humanistic, behavioural and educational psychology. My formal education and subsequent academic career began in 1999, where my childhood aspirations of being a teacher and a nurse were fulfilled in my achievement of a master degree in nursing education at the University of Sydney. In retrospect, the completion of this degree changed my life direction more than I could have known at the time. I entered university at a master level, naïve and neither knowing what was ahead nor understanding the world that I had entered or the pathway it would set me on. My master degree challenged and changed me. It was not just about what I had learned about education, but what I had learned about myself and what had become as a result of being immersed in this academic, educational and social context. The knowledge and experience I gained empowered me personally to overcome obstacles, explore, discover and become more of what I wanted to be. I developed a greater understanding of people and how to empower others to grow and become what they too wanted and believed they could be.

On completion of my degree, I was invited by the university to teach undergraduate (UGNs) in behavioural health, which I loved. At the same time, I commenced a nurse educator (NE) role for an area health service based at two metropolitan facilities. These dual roles gave me insight into the process and product of nursing education. I worked with all levels of nurses: those becoming nurses and newly graduated nurses, postgraduate and reconnecting nurses. My career in nursing education went on to extend to varied positions and settings, across area health services, in metropolitan and regional areas and with our professional regulators and in government in New South Wales (NSW).

During this time, I studied coaching psychology, travelled some more, moved homes, met and married my husband and in 2008 moved from NSW to Queensland. Another change, another

transition. This move brought me to Cairns where I commenced working at James Cook University (JCU). This gave me the opportunity to reconnect with the university sector and educating UGNs. It was working in this environment, coupled with the encouragement of my husband that would ultimately be the catalyst in motivating me to do this PhD. Our time in Cairns, however, was short. After 2 years, I moved to live in South Korea. This was a move, like others, I thought I was prepared for, and was excited about. On reflection, I could never have been prepared for this move. South Korea immersed me in a new world that has at times been a difficult transition and adaptation but equally fulfilling and exciting. A culture far removed from my own, a way of living, different to what I was used to and a new perspective from which to experience the world. Fortunately, I was able to continue working remotely with JCU teaching undergraduate and postgraduate nurses in Australia. In my time in South Korea, I have also been presented with the opportunity to participate in education here and in Cambodia—education and nursing systems vastly different to my own but equally informative in areas of my career and life. Like Saudi Arabia, nursing, nurses and nurse education were different, but despite the differences, all nurses were experiencing the same trepidation, challenge and joy of becoming and being a new nurse. The collective outcome of these experiences and my move to South Korea presented me with the opportunity and incentive to do my PhD.

On reflection, choosing nursing to begin my career journey was the right choice. Nursing provided me with the foundations that fostered my desire and passion to understand others and to care, nurture and develop people to empower them to achieve. Nursing provided the pathway for me to travel across the world and experience multiple ways of seeing and doing things, new ways to understand the world and the belief that the world is what we make of it. Nursing introduced me to the power of education and the impact this can have on people's lives. Education empowered me and gave me the capability to empower others. Collectively, these experiences extended my perspectives, knowledge and understanding of nursing and education and contributed to my ability to focus on and develop others.

Chapter 1: Introduction

1.1 Introduction

The purpose of this chapter is to introduce and justify the study presented in this thesis. The chapter begins with the impetus for this study, which is followed by a synopsis of the existing knowledge related to practice readiness. The aims, questions and significance of the research are then presented, which emphasises the importance of this study in the broader context of the nursing profession, healthcare and the Australian population. A summary of the methodology and the rationale for choosing case study as an appropriate research design is provided, followed by a description of the researcher's position in this study. The chapter is completed with an outline of the chapters contained within this thesis.

1.2 Impetus for the Study

The impetus for this study came from an interest in undergraduate and postgraduate nurse education and the factors that facilitate continuous learning and development. The incentive to progress the study came from two points of reference. The first stemmed from a conversation with Professor Birks, who at the time was Professor of Nursing (Learning and Teaching) and now part of my supervisory team. Having an interest in education and the continuum of nurse development through education left me with a broad scope of areas from which to choose. I shared some vague ideas with Professor Birks and the discussion that followed was both interesting and motivating. Her enthusiasm and interest in research, education and, importantly, me doing a PhD was motivating. We talked about different ideas and the areas in undergraduate nurse (UGN) education that Professor Birks was exploring. This gave me ideas about potential topics and how to consider what to study. I left her office with a suggestion to begin by exploring the literature about undergraduate nursing education.

Scoping the literature was the second point of reference. I began by examining issues related to undergraduate education that linked to clinical practice and postgraduate nurses. Transition experiences of new graduate registered nurses (NGRNs) were conspicuous; however, what struck me was the prominence of comments that indicated new nurses were not practice ready. I read more, and being 'work ready' or 'practice ready', 'ready to hit the ground running' and 'fit for purpose' began to emerge in the literature as issues for nurse

education and transition, clinical practice and quality patient care. Further, practice readiness seemed to be of longstanding interest, and an interest common to the profession internationally. The experiences I read about were those I recognised from my 29 years of nursing experience. There was still a theory–practice gap that the move from hospital to university models of education had not closed; rather this was now accentuated and extended to become a preparation–practice gap. Nurse education was still 'failing' to adequately provide undergraduates with the capabilities and experience to be practice ready for their role as a registered nurse (RN). NGRNs continued to face high stress and challenging experiences because they were determined to be prepared but not ready for the realities of nursing. A concerning factor in all of this was the increasing attrition rate of new nurses from the profession, which seemed to be linked to NGRNs not being ready for practice. NGRNs are the future of the nursing profession, a profession that provides the opportunity and power to change and enhance one's life and the lives of others. This loss to the profession represents a missed opportunity for the NGRN and risk to the future of healthcare.

Curious that given the regulation, research, education and strategies, we were still having challenges preparing practice-ready nurses, and improving their transition outcomes, I began to consider what was being overlooked. This led me to first consider what we understand as practice readiness. I investigated the literature specific to practice readiness; in particular, what this meant and who was prominent in the conversation about NGRN practice readiness. I found that while opinions about a lack of readiness were evident, a common understanding, meaning or definition of practice readiness was not; nor was it clear how decisions about practice readiness were made, and what was required to improve practice readiness in Australia. I believed this was an important gap in our knowledge about NGRN preparation, transition and attrition of NGRNs. I thought this was worthy of investigating and something that if understood more comprehensively, could make a critical difference.

1.3 Existing Knowledge

In Australia, the extent to which a NGRN is prepared and ready for practice holds considerable importance for the healthcare industry, tertiary institutions and professional organisations. NGRNs enter a healthcare system that over the last decades has seen considerable change, resulting in a dynamic, unpredictable and demanding work environment. How care is delivered, the practice of healthcare professionals and the profile

and needs of healthcare recipients are all factors in this complexity (Health Workforce Australia [HWA], 2012a; Mason, 2013). Healthcare expenditure has grown, and health reform to improve outcomes drives healthcare leaders to seek cost-efficient, modern healthcare that is safe and adaptive to consumer requirements (HWA, 2012b; National Health and Hospitals Reform Commission [NHHRC], 2009; Productivity Commission [PC], 2015). As a result, the healthcare system has become more challenging as managers attempt to adapt to change and cope with demand (Australian Institute of Health and Welfare [AIHW], 2014; HWA, 2014a; Mason, 2013).

Patient safety in such environments hinges on having appropriate healthcare professionals in adequate numbers, with the capability and competence to manage and provide a safe standard of healthcare (Aiken et al., 2014; Dawson, Stasa, Roche, Homer & Duffield, 2014; Hayes et al., 2012; HWA, 2014b). Therefore, the ability of NGRNs to enter current healthcare contexts ready to practice competently as a RN is essential to maintain safe standards of care (El Haddad, Moxham & Broadbent, 2013; Hegney, Eley & Francis, 2013; Kelly & Ahern, 2009; Milton-Wildey, Kenny, Parmenter & Hall, 2014; Walker & Campbell, 2013).

Being practice ready is an anticipated outcome of the educational preparation of RNs. Degree programs designed to prepare RNs in Australia are developed and regulated according to professional standards accreditation processes and legislation (Australian Nursing and Midwifery Accreditation Council [ANMAC], 2012, 2015; Nursing and Midwifery Board of Australia, [NMBA], 2006). Graduating from these accredited programs indicates that the level of competence required to meet these requirements has been achieved. Accordingly, a nursing graduate is deemed prepared with the foundational skills, knowledge, behaviours and attributes that enable them to be employed as a RN and practice across a variety of healthcare settings (ANMAC, 2012).

Despite this education and the need for NGRNs to be practice ready, studies investigating the educational preparation of RNs and NGRN transition experiences suggest that the current preparation of nurses is inadequate and NGRNs are not ready for practice (Bowles & Candela, 2005; Candela & Bowles**,** 2008; Hegney et al., 2013; Kelly & Ahern, 2009; Milton-Wildey et al., 2014; Ralph, Birks, Chapman & Francis, 2014; Missen, McKenna & Beauchamp, 2015). Reasons for this lack of readiness are often attributed to the educational preparation failing to meet the needs and expectations of healthcare providers (HCPs) and to

provide relevant clinical experience to bind knowledge with practice (Hegney et al., 2013; Kelly & Ahern, 2009; Watt & Pascoe, 2013).

Studies examining the perspectives of NGRNs and employers highlight deficits in NGRNs' performance that reinforce the perception that they are not practice ready. For example, this work suggests that NGRNs have difficulty applying knowledge to practice, exhibit gaps in clinical skills and competence, and are challenged in managing workloads and workplace demands (Freeling & Parker, 2015; Hegney et al., 2013; Kelly & Ahern, 2009; Milton-Wildey et al., 2013; Missen McKenna & Beauchamp, 2014a, 2015; Parker, Giles, Lantry & McMillan, 2014; Purling & King, 2012; Watt & Pascoe, 2013; Waters, Crisp, Rychetnik & Barratt, 2009). Similarly, studies exploring NGRN transition experiences indicate that NGRNs are not practice ready because of the difficulties they have in adapting to the realities of the healthcare environment and the responsibilities of their new role (Hegney et al., 2013; Kelly & Ahern, 2009; Missen, McKenna & Beauchamp, 2014b; Newton & McKenna, 2007; Watt & Pascoe, 2013). Many NGRNs lack confidence and feel apprehensive about their new role; consequently, they become overwhelmed with their responsibilities, feel inadequate and choose to leave nursing in their first 1–3 years of practice (Hegney et al., 2013; HWA, 2014a; Kelly & Ahern, 2009; Milton-Wildey et al., 2013; Walker & Campbell, 2013).

While there has been meaningful research investigating NGRNs' educational and transition experiences that may suggest NGRNs are not practice ready, there has been minimal national or international research that specifically explores and explains the concept of 'practice readiness' (Caballero & Walker, 2010; Dlamini et al., 2014; Walker et al., 2013; Wolff, Regan, Pesut & Black, 2010). A lack of practice readiness is most commonly linked to gaps in a NGRN's clinical practice and mismatched expectations of performance between HCPs, NGRNs and educational institutions (El Haddad et al., 2013; Hegney et al., 2013; Milton-Wildey et al., 2013; Missen et al., 2015; Walker & Campbell, 2013). Evidence from national and international studies suggests practice readiness is poorly defined and understood (El Haddad et al., 2013; Walker & Campbell, 2013; Walker et al., 2013; Wolff, Pesut & Regan, 2010; Wolff, Regan, et al., 2010). Current narratives describe practice readiness as a complex, multidimensional construct where skills required for readiness go beyond discipline-specific competencies (Caballero & Walker, 2010; Walker & Campbell, 2013; Walker et al., 2013; Wolff, Regan et al., 2010).

Certain attributes and broad skills are said to characterise the work ready graduate (Caballero & Walker, 2010; Walker et al., 2013; Wolff, Pesut et al., 2010). For healthcare professionals, these abilities are said to positively or negatively influence job satisfaction, retention and the ability to manage transition experiences (Caballero, Walker & Fuller-Tyszkiewicz, 2011; Walker & Campbell, 2013; Walker et al., 2013). Social, historical and practice contexts have been found to shape RNs' perceptions of NGRN practice readiness, leading to variation in description, opinion and expectation of NGRN education and performance across healthcare contexts and among organisations (Kelly & Ahern, 2009; Walker & Campbell, 2013; Wolff, Pesut et al., 2010).

Predicted nursing workforce shortages are underscored by the exit of veteran nurses from the workforce. This, coupled with increasing healthcare demand, provides an imperative for universities and HCPs to adequately prepare and retain those new to the nursing profession as a key priority (AIHW, 2012b; HWA, 2014b). There is growing evidence that NGRNs' intention to leave and attrition rates in first year are steadily increasing (Beecroft, Dorey & Wenten, 2008; Booth, 2011; D'Ambra & Andrews, 2014, Flinkman & Salanterä, 2015; Hayes et al., 2012; Hillman & Foster, 2011; HWA, 2012b; Laschinger, 2012; Laschinger, Finegan & Wilk, 2009; North et al., 2013; Trepanier, Early, Ulrich & Cherry, 2012; Zimmerman & Ward-Smith, 2012). Factors contributing to this steady increase hark back to the suggestion that NGRNs are not prepared and practice ready for current healthcare demand. As a result, NGRNs do not move seamlessly into clinical practice as RNs. Instead, they have difficult transitions to practice, and experience high job dissatisfaction and early burnout, leading to the choice to leave nursing early in their careers (D'Ambra & Andrews, 2014; Hayes et al., 2006; Hegney et al., 2013; Kelly & Ahern, 2009; Milton-Wildey et al., 2013; Missen et al., 2014a; Walker & Campbell, 2013). The loss of NGRNs at a time when demand and workforce shortages are at their highest could lead to greater burden and adverse consequences for healthcare services now and in the future (AIHW, 2012b; HWA, 2012a, 2014b).

In Australia, research examining the concept of NGRN practice readiness has been limited to qualitative studies and survey research in specific geographic areas, healthcare settings and specific groups of healthcare professionals. These studies, commonly conducted by the same researchers, have focused on the perspectives of UGNs or NGRNs, or have involved graduates from other professions (Caballero et al., 2011; Caballero & Walker, 2010; Walker & Campbell, 2013; Walker et al., 2013). Two qualitative studies explored the meaning of

practice readiness with HCPs and how it influences job satisfaction (Walker et al., 2013; Walker & Campbell, 2013). No studies have explored the meaning of practice readiness using a multiple case study approach with different groups of healthcare professionals that work closely with NGRNs across geographic locations.

1.4 Research Aim

The aim of this research was to define NGRN practice readiness from the perspective of Australian HCPs and explain the process by which a NGRN is determined to be practice ready.

The specific research questions that guided this research were:

1. How do HCPs define NGRN practice readiness?
2. What factors influence how HCPs perceive and determine NGRN practice readiness?
3. How do NGRNs demonstrate practice readiness?
4. How do HCPs' interactions with NGRNs affect NGRNs' ability to demonstrate practice readiness?

1.5 Significance of this Research

A NGRN's level of practice readiness affects their transition to practice, patient safety and workforce retention. Being practice ready to meet healthcare demand means NGRNs need to be prepared with the capability to provide safe professional practice within a demanding and evolving healthcare system. While growing evidence implies that NGRNs are not practice ready, a common understanding of NGRN practice readiness and how practice readiness is achieved, measured and determined remains unclear and variable. As a result, inconsistencies in expectations exist between HCPs, NGRNs and education providers. Such inconsistencies can lead to NGRNs having difficulty meeting HCPs' expectations, adjusting to their new role and providing a safe standard of care. Developing realistic expectations of performance and making valid decisions about NGRN practice readiness relies on having a sound understanding of what practice readiness means for NGRNs and the healthcare contexts for which NGRNs are been prepared.

An in-depth exploration of the meaning of NGRN practice readiness from those who employ NGRNs would improve this understanding. Seeking the views of those working

closely with NGRNs when they commence practice could provide valuable insight into the necessary capabilities to perform competently across healthcare environments. This improved understanding could inform NGRNs' educational preparation to better align NGRN learning outcomes with the needs and expectations of the healthcare system. As a result, NGRNs could be better prepared for the complexities of healthcare, the responsibilities associated with the RN role and the ability to provide safe competent care when they commence practice. Enhancing practice readiness has the potential to improve NGRNs' transition experiences and the programs that support their professional socialisation into the healthcare environment, and to decrease attrition rates of NGRNs.

1.6 Study Design

An interpretive approach using a collective instrumental case study design (Stake, 2006) was used to investigate NGRN practice readiness from the perspective of HCPs in Queensland, Australia. Case study is described as:

> 'a qualitative approach where the researcher explores a bounded system (a case) or multiple bounded systems (cases) over time through detailed, in-depth data collection involving multiple sources of information (e.g., observations, interviews, audiovisual material, and documents and reports) and reports a case description and case-based themes' (Creswell, Hanson, Plano-Clark & Morales, 2007, p. 245).

An instrumental case study uses a single case 'as a way to understand something else: to explore and understand an issue or phenomenon of interest beyond the cases themselves' (Stake, 1995, p. 3). In a collective instrumental case study, multiple cases are investigated and the findings from each case are brought together to achieve this goal (Stake, 2006).

In this study, the perspectives of healthcare professionals employed within four healthcare institutions in four geographic locations in Queensland are the focus of the investigation. Methods employed to collect data included semi-structured interviews and a focus group; document review; and field notes. Data from each case were analysed individually then collectively across cases, using selected grounded theory methods of analysis. Findings from each case were integrated and interpreted against the research questions, and recommendations are made that inform Australian higher education and healthcare sectors about NGRN practice readiness.

Case study was chosen as it provides a systematic means for an in-depth, comprehensive inquiry of a complex phenomenon within its context—a key consideration for addressing the research aim and questions of this study. Case study is often recommended when little is known about complex topics and when exploration, discovery of knowledge, description and explanation is needed. Case study research is particularly apt when contextual and/or complex variables are important to understanding the issue (Merriam, 2009; Stake, 2006; Yin, 2014). Case study designs support the exploration of multiple perspectives, using multiple methods while focusing on the real world of practice (Stake, 2006; Yin, 2014). Luck, Jackson and Usher (2006) emphasise that case study offers a means of gaining knowledge of contextual phenomena that is likely shared by a number of individuals: 'there is a deliberate re-searching for understanding of human knowledge and meaning in the complex social, physical and situational real world' (Luck et al., 2006, p. 105). Exploring a phenomenon within its social reality and collecting multiple perspectives of the phenomenon provides the in-depth detail required to fully understand the features that create a phenomenon. In this study, the value of using case study rests with being able to generate variable data about NGRN practice readiness as it emerges within context. Case study and its specific application in this research are discussed in detail in Chapter 3.

1.7 Positioning the Researcher

Being a qualitative case study, the research process occurs through the researcher's actions and interactions with participants and their context (Denzin & Lincoln, 2011; Stake, 2006). As the instrument of the research, the researcher's background and personal characteristics can influence the choices made in conducting the research, and consequently the quality and rigour of the study findings (Denzin & Lincoln, 2011). Therefore, it is important that the researcher examines and makes transparent their position in relation to their study. Being able to manage subjective influence is important to the integrity and credibility of the findings and for ensuring the participants' voices are foremost in the findings. Informing the reader of the researcher's background, philosophical perspectives and experiences related to the topic enables the reader to make their own judgment about the researcher's influence and, consequently, the quality of the study outcomes.

To this end, I reflected on my personal and professional history and considered how my background has led to my worldview and the influence this could have on the study. Berger (2013) contends that being able to examine ourselves and our internal dialogue can reveal

past influences that guide our present experiences. Such insight can help explain our reactions and approaches to research data, take responsibility for this and adopt methods to both recognise and mitigate this influence. Establishing my philosophical assumptions involved questioning my beliefs about what I count as knowledge (ontology); how I know what I know (epistemology); and the role of values in research (axiology) (Denzin & Lincoln, 2011). I did this at the beginning of this research, a process that refined and affirmed the case study approach used in this study.

I commenced this study with some experience in research and a solid background in education and nursing, which spanned clinical, government and academic settings and nursing, administration, education and academic roles commencing in NSW and Queensland. My experience in Queensland extended my experience in NSW, advanced my learning and development, and introduced me to new people and places.

Reflecting on my professional history, I have experienced education and nursing across contexts and from diverse vantage points. I realised that I have seen, heard and felt the experience of transition across roles and from many perspectives. I have worked with NGRNs throughout my nursing career in different ways: as a manager, teacher, supporter and arbitrator. I have coordinated and participated in NGRN programs and have an understanding of the challenges and stressors this involves. Conversely, I have experienced the dichotomy of being the HCP attempting to accommodate, educate and grow new nurses, seeing first-hand the frustrations of NGRNs' underperformance and the delight of competence. I have worked with and educated nurses, doctors, allied health (AH) and others within the healthcare system, and witnessed the outcome of good and poor care because of varying levels of practice. Working in universities educating nurses across all three years of undergraduate and into postgraduate years, I experienced the influence and outcome of education. I firmly believe that university education not only develops knowledge, it develops humans on all levels. Each of these experiences has built upon and informed the other, providing me with insightful experiences and a depth of knowing that continues to inform my current teaching role and now my research experience. Explicating my professional history brought about insights and knowledge on the topic I had not previously recognised. This not only raised my awareness of the knowledge I had on the topic but also and equally, my awareness of the spontaneous thoughts and understandings I had about NGRNs.

Similarly, my personal history has informed how I view the world and how I have come to align myself with a qualitative approach to research and a constructivist interpretive paradigm. Being part of a large family influenced my desire to be an individual and part of a group and understand how we all have different perspectives on the past, present and future. My inclination for self-discovery, travel and seeking different perspectives on life cemented this understanding. Living in a country dissimilar to my own, and conversing with those whose life experiences are vastly different to mine, has shown me how our views of reality are influenced by diverse and varied factors.

These experiences have led me to believe that we can learn from being immersed in different contexts. Interactions in social exchanges contribute to the development of knowledge and can have a powerful influence on human potential. Knowledge is not static; it continuously evolves and we learn from our experiences. As such, as our individual perspectives, realities and knowledge change; our truths are multiple and evolutionary. Similarities and differences co-exist in the same reality and equally inform our understandings of this reality. What is real for one person is not so for the other—no one view is the truth, yet the view of a person is their reality; thus it is their truth until they choose to make it otherwise. This I believe aligns me further with a qualitative constructivist paradigm. The notion that we as individuals have different perspectives on reality means there is much knowledge to be gained from exploring these realities. I believe that when we explore and harness the unique perspectives of individuals we cultivate greater awareness and deeper understanding, and develop knowledge. Respectfully probing, listening and discussing the experiences of others constructs knowledge. For me, seeking perspectives and gathering insights is the first step in establishing an understanding of how things come to be, developing new knowledge and creating new realities about current situations. I believe this background is invaluable and informs how I function today in any position I undertake, including that of the researcher in this research.

1.8 Thesis Organisation and Overview

This thesis is organised into 11 chapters. An outline of each chapter is provided below:

Chapter 1 Introduction: This chapter has introduced and provided an overview of the study. The impetus for the research and existing knowledge about the topic opened the chapter. The significance of the study was justified and an overview of the research aim,

questions and research methodology employed was presented. The chapter closed with an explanation of the researcher's position within the study.

Chapter 2 Background Literature Review: This chapter extends the existing knowledge of the topic presented in Chapter 1. The background and current literature relating to NGRN practice readiness is discussed and contextualised within key areas relevant to practice readiness in Australia: the healthcare system, nurse education and NGRN transition.

Chapter 3 Methodology: This chapter presents a detailed exploration of case study research as the methodology employed for this study. The research design is outlined and constructivism and symbolic interactionism are explained as the theoretical framework that underpins and guides the research process.

Chapter 4 Methods: This chapter outlines the methods employed for case and participant selection and recruitment, data generation, collection and analysis in this study. Ethical procedures and the methods to maintain and document the chain of evidence are described.

The next five chapters report the findings from this collective case study. The findings begin with an introduction to the individual cases of the study. Four chapters that present the key findings of this study follow. Each chapter provides an analytical presentation of one of the four major categories and subcategories of the findings.

Chapter 5 Findings - Cases: In this chapter, the reader is introduced to the four cases in this collective case study. The context of each case is described and the similarities and differences between each are outlined. These descriptions provide the contextual background for the key findings presented in the subsequent chapters.

Chapter 6 Findings - Dominance of Context: This chapter presents *Category 1: Dominance of context* and describes how the characteristics of the healthcare context influence HCPs' perceptions and decisions about NGRN practice readiness.

Chapter 7 Findings - Defining Practice Readiness: This chapter examines *Category 2: Defining practice readiness* and illustrates how HCPs define practice readiness. The multidimensional capabilities that define practice readiness are described, which provide insight to what HCPs suggest NGRNs need in order to be practice ready to manage the role and responsibilities of a novice RN in healthcare contexts in Australia.

Chapter 8 Findings - Determining Practice Readiness: In this chapter, *Category 3: Determining practice readiness* is presented to explain the process by which HCPs in this study determine a NGRN to be practice ready. The process HCPs use and the outcomes of their decisions are explained.

Chapter 9 Findings - Developing Practice Readiness: This is the final findings chapter, which explores *Category 4: Developing practice readiness*. This category describes the factors that the HCPs suggested enable NGRNs to develop, demonstrate and enhance their practice readiness and, subsequently, create more successful transition experiences.

Chapter 10 Discussion: This chapter is dedicated to discussing the key findings in the context of the literature and nursing practice. The relevance of the study findings in regard to NGRN preparation and practice readiness and the wider context of healthcare in Australia is presented as a foundation for the recommendations presented in the final chapter.

Chapter 11 Conclusion: Chapter 11 concludes the thesis, and the quality of the study is reviewed. Recommendations and implications for nursing education, practice, policy and research are considered and limitations of the study are identified.

Epilogue: A short Epilogue with the researcher's final reflection on the research process concludes the thesis.

1.9 Chapter Summary

This chapter introduced the study and set the scene for the research reported in this thesis. The research aim, questions and design were detailed with a synopsis of the background to the study that justifies the significance of the research. Chapter 2 expands on this background and provides a more in-depth exploration of practice readiness within the context of NGRNs, nurse education and the Australian healthcare context.

Chapter 2: Background Literature

2.1 Introduction

In Chapter 1, the significance of this study and the research aim, questions and design were introduced and explained. The purpose of this chapter is to establish the context of the study and current knowledge about the substantive area of inquiry. In doing so, this chapter expands on the background information presented in Chapter 1 and sets the scene for the subsequent inquiry process. The chapter beings with an overview of the search strategy and the literature used to inform this review. The key themes identified from the review are presented and discussed. The chapter closes with a summary of how the literature informed the research aim and questions for the study.

2.2 Reviewing the Literature

The aim of this review was to confirm the purpose and establish the context of the study and, examine the current knowledge about practice readiness in Australia and overseas. It therefore constitutes a general literature examination of subject matter for key themes (Grant & Booth, 2009) related to practice readiness prior to commencing the collection of data for this study (which occurred between December 2015 and July 2016). This review is augmented in the discussion chapter of this thesis (Chapter 10) with further research on practice readiness released between 2016 and 2018. A broad approach was taken to cover the breadth of contextual information relevant to the study aim. Reviewing the literature facilitated the identification of issues and questions related to the topic. This strategy is suggested by Stake (2006) as a means of refining and focusing the research design and process. The questions and their relationship to the study are presented at the conclusion of this chapter.

2.3 Search Strategy

Establishing the context of the study and existing knowledge related to practice readiness required searching national and international literature from various sources as listed in Table 1. Information related to practice readiness was found in literature related to healthcare and the healthcare workforce, and nurse education, regulation, preparation and transition. Literature accessed was in English, was full text and included all work available

up to the commencement of the study. An open-ended timeframe was necessary to capture seminal literature related to developments in nurse education, regulation and transition that was pertinent to the topic of practice readiness. Key search terms included one or a combination the following terms:

1. Australia*
2. healthcare, healthcare workforce and healthcare system
3. nurse* education; workforce; profession; regulation, turnover, retention, attrition, transition, socialisation
4. new graduate, graduate, newly qualified and novice nurse or registered nurse
5. practice, work ready*, fitness/fit for practice
6. nurse* graduate*; new* qualified; theory–practice gap; preparation–practice gap.

Table 1: General Examination of Literature—Sources

1. **Electronic databases:** CINAHL, OvidSP, Medline, Scopus, ProQuest, Informit-Health Collection, Google Scholar
2. **Documents:** Peer-reviewed journals, thesis, reference textbooks, reports, policies
3. **Websites:** National and international government, industry, education and professional websites. The following websites were specifically chosen, as they were dominant in the literature related to the context and aim of the study.

   National government and professional websites:

   - *Australian Government Department of Health (AGDOH)*
   - *Australian Institute of Health and Welfare (AIHW)*
   - *Australian Bureau of Statistics (ABS)*
   - *Australian Commission on Safety and Quality in Health Care (ACSQHC)*
   - *Health Workforce Australia (HWA) (decommissioned)*
   - *Queensland Health (QH)*
   - *Australian Health Practitioner Regulation Agency (AHPRA)*
   - *Nursing and Midwifery Board of Australia (NMBA)*
   - *Australian Nursing and Midwifery Accreditation Council (ANMAC)*
   - *Australian Nursing and Midwifery Federation (ANMF)*
   - *Australian College of Nursing (ACN)*

   International organisational and professional websites:

   - *International Council of Nurses (ICN)*
   - *Institute of Medicine (IOM) United States (US)*
   - *National Health Service (NHS) United Kingdom (UK)*
   - *World Health ,*

2.4 Screening and Themes

Screening information focused on relevance to the area of enquiry and included whether the content and reported findings were relevant to the aim of the study. For research articles, abstracts were retrieved and reviewed for relevance. Reference lists of identified journal or government publications were also reviewed for further sources.

The literature revealed that practice readiness of NGRNs is a concern for higher education, the healthcare industry and the nursing profession. General exanimation of the literature identified five key themes and subthemes (Table 2) which frame the background discussion in this chapter.

Table 2: General examination of the literature—Key themes and subthemes

Themes	Subthemes
1. The context of practice - Australian healthcare system	• *Healthcare services* • *Healthcare demand and reform* • *Healthcare workforce*
2. The nursing workforce	• *Challenges and changes* • *Nurse retention and turnover*
3. Preparing RNs in Australia	• *From hospitals to higher education* • *University-educated nurses* • *Nurse education and regulation* • *Nurse education—concerns and challenges*
4. NGRN practice readiness	• *NGRN preparation and practice readiness* • *NGRN transition and practice readiness* • *NGRN workplace and practice readiness*
5. Conceptualising practice readiness	

2.4.1 The Context of Practice—Australian Healthcare System

The Australian healthcare system plays an important role in the education of RNs. In conjunction with universities, healthcare settings across Australia are the context in which NGRNs are prepared for and commence their first year of practice. In nursing, the need for practice-ready NGRNs stems from factors within the Australian healthcare system that challenges the provision of healthcare and makes it a complex system to negotiate. These include the evolution of healthcare and consumers, financial constraints associated with an expanding healthcare system and challenges with maintaining a safe, sustainable healthcare workforce to provide contemporary healthcare.

Kuziemsky (2016) describes healthcare systems as complex adaptive systems characterised by 'emergent behaviours, non-linear processes, co-evolution, requisite variety, and simple rules' (p. 5). As a healthcare system grows, internal and external processes related to consumers, care delivery, management and economic, educational and policy directives constantly interact and adapt over time (Kuziemsky, 2016). The degree of interrelatedness between the elements and the emergent and often unpredictable outcomes make health management and reform challenging.

Australian healthcare reflects this complexity with multiple layers of government, organisations, services and consumers involved with the system (AIHW, 2016a). Federal, state and territory governments, with their respective local governments, hold joint responsibility for the administration, funding, coordination and regulation of healthcare. In partnership with non-government sectors, they implement policy, plan and deliver healthcare services (AIHW, 2014; Biggs, 2013). National health policy, administered via the federal Health Minister, provides the defining framework for decisions related to healthcare delivery (AIHW, 2014). The federal government is the primary source of funds (over 43%) with state and territory governments managing funds within their local jurisdiction. Shared responsibilities in the system include healthcare workforce regulation and education, safety and quality in healthcare, pharmaceutical regulation and funding for public health and Aboriginal and Torres Strait Islander programs (AIHW, 2016a).

Regulation of healthcare standards is primarily through the ACSQHC (ACSQHC, 2015). The ACSQHC administers the *National Safety and Quality Health Service* (NSQHS) *Standards* that specify the measures HCPs must implement to ensure safe, quality healthcare

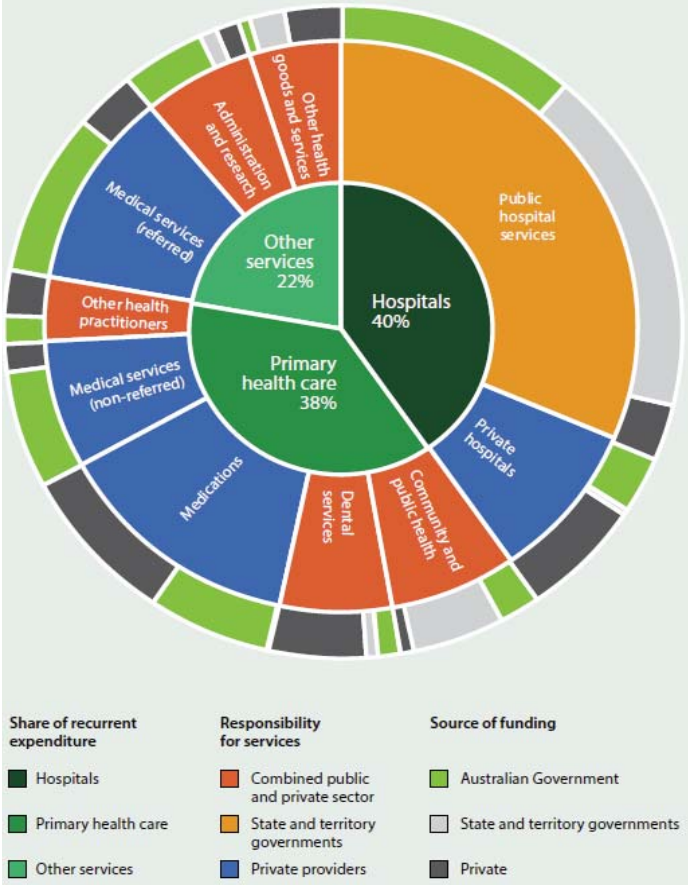
(ACSQHC, 2012). Healthcare professionals are central to enacting and maintaining the standards. Fourteen healthcare professions, including nursing and midwifery, represent the majority of the healthcare workforce in Australia. Regulation of healthcare is threefold via legislation, professional bodies and healthcare standards. Under national law and in partnership with AHPRA, national boards hold the responsibility for regulating health professional education, standards of practice and registration (AHPRA, 2015).

Healthcare Services

Healthcare services in Australia vary as a result of environmental, geographic and population demographics. The healthcare system is designed to accommodate these variations, resulting in a range of healthcare models and service providers. HCPs encompass individuals and institutions that provide health services to consumers (Harris, Nagy & Vardaxis, 2012). Individuals include healthcare professionals in a range of healthcare disciplines (AIHW, 2014; Biggs, 2013). Institutions include all healthcare facilities including hospitals and aged care facilities, general practices and community clinics, and healthcare agencies. The level of healthcare depends on the geographical location and access to funding, infrastructure and resources, including the healthcare workforce. Many locations in Australia are considered rural and remote, affecting the availability, nature and demand for healthcare services (AIHW, 2014).

Community, secondary and tertiary care facilities provide primary and acute care (AIHW, 2016a). These vary in the depth and breadth of services and location. Primary care services are provided by healthcare practitioners in consumers' homes or public and private community clinics or centres (AIHW, 2016a; Biggs, 2013). Acute care is provided by both private and public secondary and tertiary care services. In 2013–14, a total of 1,359 hospitals with 747 public and 612 private facilities were identified (AIHW, 2016a, p. 34). Most tertiary facilities are located in metropolitan centres, where a high level and broad scope of services is available. Regional areas are commonly characterised by secondary care services (AIHW, 2016a). While substantial services may be available in regional centres, access to specialist care often requires travel to tertiary facilities. In remote and very remote locations, primary care clinics, often managed by RNs or nurse practitioners (NPs), are the most common and often only providers of healthcare (AIHW, 2014). Figure 1 captures the key inputs of the healthcare system highlighting the services, providers and funding responsibilities.

Figure 1: Health services funding and responsibility 2013–14 (AIHW, 2016a, p. 28)



Healthcare Demand and Reform

Over the last decade, healthcare in Australia has undergone rapid and significant change. Healthcare demand is increasing and evolving to the point that service demand is exceeding workforce capacity and funding arrangements. Consequently, Australian healthcare has been the focus of significant reform (HWA, 2014a, NHHRC, 2009; PC, 2015). Prominent factors driving the need for reform include trends in society, healthcare service delivery and the healthcare workforce (AIHW, 2016a; Mason, 2013; NHHRC, 2009). Key among these are:

- advances in science, research, technology and treatments
- demographic profile of the population:
    - growth, ageing and longer life expectancy
    - increasing cultural, ethnic and geographical diversity
- increase in complex, chronic illness and comorbidity
- projected workforce shortages of nurses and doctors.

As a result, healthcare challenges are constant and evolving and include (AIHW, 2016a; HWA, 2014a; PC, 2015):

- fiscal restraints requiring cost effective, efficient healthcare
- policy initiatives for community-based care and interprofessional practice
- health workforce capability and distribution that does not meet needs
- health reform to regulate, mobilise and extend the practice of healthcare professionals:
    - national registration
    - role redesign and extended scopes of practice
    - initiatives to optimise and work to scope of practice
- nursing turnover including NGRNs.

Healthcare is resource intensive and expensive and costs continue to rise (AIHW, 2016a). Within the last 10 years, Australia has not only experienced changes in government but has also had to manage the influence of global challenges affecting all countries (AIHW, 2016a). Health policy and funding has been altered to accommodate slower economic growth related to the Global Financial Crisis and emerging health risks such as antimicrobial resistance, and pandemic and epidemic diseases (McCloskey, Dar, Zumla & Heymann, 2014). Population growth and ageing are estimated to create significant fiscal and healthcare pressures. Natural and manmade disasters and an impending health workforce shortage further strain the health budget (AIHW, 2016a; HWA, 2014a; McCloskey et al., 2014; Ralph et al., 2014).

As a result of escalating costs, efficiency and cost effectiveness are a constant priority for healthcare leaders (PC, 2015). While the growth in expenditure has slowed, the ratio of health to Gross Domestic Product (GDP) remains high at 10% of GDP (AIHW, 2016a). Total government spending is expected to increase from 22% of GDP in 2015–16 to 27% by 2049–50 (Commonwealth of Australia, 2010). Moderating costs and creating efficiency is now paralleled with a need to manage increased and altered healthcare demand (Twigg, Duffield, Bremner, Rapley & Finn, 2012). Healthcare consumers require more complex, specialised, interprofessional care (AIHW, 2016a). Healthcare managers are challenged to balance efficiency with adequate staffing and skills mix for safe quality care in the face of inadequate or diverse skill mixes and workforce shortages (Jackson, Girvin & Davidson, 2014; Twigg et al., 2012). A particular concern is a need for greater distribution of the

healthcare workforce in regional and remote areas. A number of geographically isolated areas remain without adequate support and infrastructure for effective healthcare (Mason, 2013). Gaps in services provision are particularly problematic for Aboriginal and Torres Strait Islander communities and some outer metropolitan communities.

Healthcare reform to address these changes constantly propels and modifies the healthcare system. These alter the practice of healthcare professionals and their workplace environment. Shifting healthcare and redirecting resources from acute care services to primary and preventive care and population health initiatives are a key focus health reform to meet future demand (Waters, Rochester & McMillan, 2012). Enabling this requires a shift from the specialist acute care services to generalist, team-based community care. Achieving these goals relies on the healthcare workforce being prepared with the relevant capabilities to accommodate this level of reform (Mason, 2013). Gallagher, Fry and Duffield (2010) discuss the implications of the population changes on healthcare demand and note the importance for 'architects of the Australian healthcare system to provide a greater number and range of expanded roles to meet projected increased demands for care, particularly in primary care settings' (pp. 119–120).

Healthcare reform has aimed to optimise the productivity of the healthcare workforce. Policy directives to alter the regulation of health professionals and increase their mobility include the introduction of the *National Registration Scheme* (Mason, 2013). This has made some progress to improving access to healthcare; however, gaps in service provision continue (PC, 2015). Other initiatives propose role redesign to enable healthcare professionals to work to the full extent of their professional practice (HWA, 2014b; PC, 2015). Skills Australia (2012) suggests that maximising skills utilisation, in addition to developing more generalised, transferable skills, improves job satisfaction and retention. For the nursing workforce, new and extended specialist roles such as NPs have enabled greater autonomy and leadership and the ability for nurses to provide comprehensive care in specialist areas and in isolated clinics in remote locations.

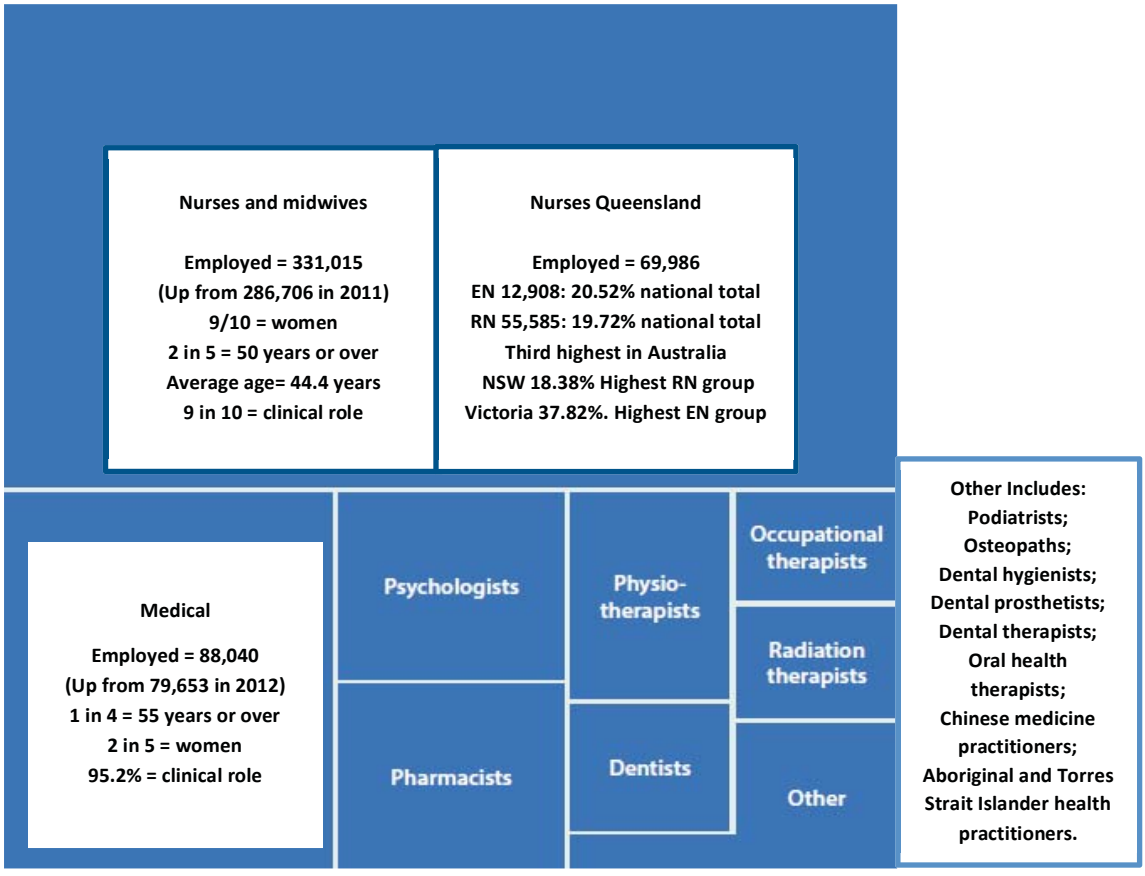
Healthcare Workforce

Mason (2013, p. 58) describes Australia's health workforce arrangements as 'complex and interdependent' where a number of health professionals come together to facilitate the provision of healthcare across diverse settings. The healthcare workforce encompasses nurses and midwives, medical and various AH and dental practitioners. Nurses and

midwives are the largest group in the workforce, followed by medical practitioners (AIHW, 2016a). Figure 2 presents workforce groups and key demographics at the commencement of this study. These figures include the numbers for Queensland, the setting for this research.

Corresponding with global trends, workforce composition and shortage are a focus of healthcare reform (PC, 2015; World Health Organization [WHO], 2015). While the Australian healthcare workforce is evolving, it remains undersized to meet current and future demand (HWA, 2014a; Mason, 2013; PC, 2015). Workforce projections detailed by HWA (2014a) indicate that a shortage of 109,490 nurses and 2,701 doctors would occur by 2025 unless measures were taken to improve workforce capability and capacity. An ageing health workforce and high attrition are key factors leading workforce shortages, with nursing and medical professionals being the most prominent (AIHW, 2014; HWA 2012a, 2014b; Mason, 2013).

Figure 2: Registered health practitioners 2015 (AIHW, 2016b; NMBA, 2016d)



2.4.2 The Nursing Workforce

The importance of nursing to the national and international infrastructure of healthcare is well recognised (AIHW, 2016b; WHO, 2015). Nurses and midwives are the largest group of healthcare professionals in Australia: almost three times that of medical professionals (AIHW, 2016a). Nurses are the main occupational group and those with the highest full-time equivalent (FTE) working in hospitals (AIHW, 2016b).

The Australian nursing workforce consists of three regulated groups of nurses: NPs, RNs and enrolled nurses (ENs). Registration is dependent upon the educational qualification and each group works at a different level depending on their position and experience. There are two entry levels to nursing: EN and RN (NMBA, 2016a). The minimum requirement for ENs is the completion of an approved diploma of nursing course delivered through the vocational education and training (VET) sector. ENs work under the supervision and direction of RNs (NMBA, 2016a). The minimum requirement for registration as an RN is the completion of a 3-year Bachelor of Nursing (BN) degree program or equivalent (NMBA, 2016a). A NGRN is a RN in their first 12 months of practice following completion of an accredited BN degree program. NPs are RNs who have completed additional prescribed, accredited education at a master level, and concomitant minimum five years experience in their field of practice (NMBA, 2016a). These nurses work at an advanced level with enhanced autonomy and decision-making capacity.

The federal and state governments are the major employers of nurses with states and territories primarily responsible for recruitment and retention. The majority of nurses and midwives work in the public sector: 56.9%, with 69.2% of these employed in hospitals (Mason, 2013, p. 51). Nurses work across all regions with a higher proportion of RNs employed in major cities. Most NGRNs in Australia are employed, and often pursue careers in acute care settings as opposed to primary healthcare (Bloomfield, Gordon, Williams & Aggar, 2015). The average age of RNs is 44.1 years with the majority (90%) being female (Mason, 2013). Between 2011 and 2015, the number of employed nurses and midwives in the 25–34 age group (51,686–65,099) and those 55 years and over (63,170–77,608) increased (AIHW, 2016a).

Challenges and Changes

Nurses worldwide face complex challenges that consistently stretch their capacity and tenacity. Discussions about NGRN practice readiness feature many of these challenges. Corresponding with global trends, Australia is forecasted to experience an acute shortage of nurses (HWA, 2014b). Health trends, an ageing nursing workforce, poor retention rates and permanent exits of early-career nurses are factors exacerbating the nursing shortage and will reduce the healthcare system's capability to cope with healthcare demand (AIHW, 2014; HWA, 2012b). Under current conditions, HWA (2014a, p. vii) predicts that the demand for nurses will continue to exceed supply with a shortfall of approximately 12,300 nurses by 2030. Despite measures to increase student numbers to bolster the future nursing workforce, numbers of nurses in practice are decreasing and still fall short of what is required (Cross, 2011; HWA, 2014a). Students completing nursing and midwifery degrees increased from 5,306 in 2003 to 9,973 in 2011, short of the predicted requirement of 18, 953 (Mason 2013, p. 260). Recommendations to increase nursing student numbers lead to many NGRNs being unable to secure nursing positions (HWA, 2014a). In 2012 in Queensland, approximately 10% of graduates were employed (Thomas, 2012, p. 6). The risks with not being employed is that NGRNs will not consolidate practice and are more likely to seek work outside of nursing and consequently leave the profession (Duffield & Chiarella, 2016). Employment rates remain an issue and continue alongside budget cuts and safety concerns that contribute to high, demanding workloads and increased job dissatisfaction and work stress—factors associated with nurse turnover (Hayes et al., 2012; Roche, Duffield, Homer, Buchan & Dimitrelis, 2015).

Nurse Retention and Turnover

Budget shortfalls and higher prevalence of job dissatisfaction, stress and burnout are correlated with higher rates of nurse turnover (Holland, Allen & Cooper 2012). Continued high healthcare demand, workforce shortages and constant change add pressure to a workforce already experiencing high levels of stress and burnout (Hayes et al., 2012; Roche et al., 2015). As a result, nurse turnover, including NGRNs, is steadily increasing and nurse retention has become a focus for healthcare organisations (Hayes et al., 2012). Multiple studies have identified a range of factors associated with nurse turnover that are summarised in Box 1.

Box 1: Factors associated with turnover and attrition of the nursing workforce

- Poor self-concept and confidence
- Work-related stress, anxiety and job dissatisfaction
- Professional burnout
- Poor leadership and limited career opportunities
- Lack of education and continuing professional development opportunities
- Difficult workplace conditions characterised by incivility, bullying, high workloads and limited support
- Staff shortages and inadequate skills mix
- Organisational fit and sense of belonging

Sources: Brunetto et al., 2013; Cowin, Johnson, Craven & Marsh, 2008; D'Ambra & Andrews, 2014; Dawson et al., 2014; Duffield, Baldwin, Roche & Wise, 2014; Halfer, 2011; Hayes et al., 2012; Kramer, Brewer & Maguire, 2011; Laschinger, 2012; Laschinger & Grau, 2012; Peterson, McGillis Hall, O'Brien-Pallas & Cockerill, 2011; Wong & Laschinger, 2013.

Turnover among NGRNs has shown a steady incline (Beecroft et al., 2008; Laschinger, Grau, Finegan & Wilk, 2010). Reports indicate that between 30% and 60% leave or plan to leave within their first year (Walker et al., 2015). For early-career registered nurses (ECRNs) including NGRNs, job and career dissatisfaction (Hayes et al., 2012; Laschinger, 2012), overwhelming workloads, difficult workplace environments and lack of support (D'Ambra & Andrews, 2014; Laschinger et al., 2009) and limited opportunity for education and career progression (Beecroft et al., 2008) are all important factors influencing ECRN turnover. The ability of senior nurses to support junior nurses becomes constrained when workloads are high and senior nurses are constantly busy. NGRNs can miss out on the quality of support required to develop their capability and help them transition effectively (Freeling & Parker, 2015). NGRNs often fear making a mistake (Ashton, 2012) and when support is limited, fear and anxiety can increase and affect standards of practice (Laschinger, 2012). Younger nurses who do not feel part of the work team and those who feel as if they do not fit well with the hospital are also more likely to exit an organisation (Malouf & West, 2011). Turnover intention increases for nurses who rate themselves lower on skills, confidence and competence (Beecroft et al., 2008). Personal characteristics (age, experience, education) can also influence intentions to leave, particularly among younger nurses (Halfer, 2011; Beecroft et al., 2008; Hayes et al., 2012). The profile of NGRNs entering nursing is generationally different (Olson, 2009; Riegel, 2013). Often younger nurses enter their

university degree from high school with little work experience and while reasons for entering nursing may be similar to older cohorts, reasons for leaving are different (Eley, Eley & Rogers-Clark, 2010). Younger nurses have different skills, commitments and values about working and can demonstrate burnout indicators earlier (Eley et al., 2010; Olson, 2009).

Evidence suggests that high turnover can negatively affect organisational and operational efficiency, job satisfaction and the overall psychological wellbeing of nurses (Brunetto et al., 2013; Dawson et al., 2014; Duffield, Roche, Homer, Buchan & Dimitrelis, 2014; Hayes et al., 2012; Peterson et al., 2011). High rates of turnover can affect standards of care and have financial and human consequences (Aiken et al., 2014; Hayes et al., 2012; Roche et al., 2015; Zimmermann & Ward-Smith, 2012). Costs associated with turnover are reported as been between $10,000 and $88,000 (Duffield, Roche et al., 2014). In Australia, the average cost is estimated to be $9,255 with ranges of $17,728–$104,686 across hospitals (Roche et al., 2015). Ongoing vacancies and staff shortages can affect healthcare teams and lead to dissatisfaction and workload challenges that create further tension and turnover for all healthcare professionals (Dawson et al., 2014).

The information considered above highlights the diversity, change and demand within the healthcare environments that currently influence NGRNs' first year of practice. The continued impact of these elements will shape how nurses are educated and practice in the future. This has direct implications for the practice readiness of NGRNs. Shifts in the healthcare workforce, rapid change and increased demand will change healthcare expectations of NGRNs who may not be prepared or supported (Gallagher et al., 2010; Holland et al., 2012). Workforce shortages, retiring experienced nurses and more nurses opting for part-time work means that the most experienced and qualified will be less available to support and educate future nurses. Further, NGRNs will replace experienced nurses; however, they lack the confidence and experience to function to their full potential. In the following section, the implications of these prevailing conditions are discussed in the context of the education and preparation of RNs in Australia.

2.4.3 Preparing Registered Nurses in Australia

Similar to the healthcare system, the education of nurses is also complex. Multiple stakeholders share the responsibility for preparing individuals as RNs. These stakeholders

include the federal, state and territory governments, professional and regulatory bodies, education and healthcare institutions. Each group is engaged in the process in different ways for varied purposes. Significant factors have shaped nursing in Australia, particularly over the last three decades. Changes in nurse education and practice coincide with historical milestones, and political and economic imperatives to meet healthcare demand. As discussed, healthcare demand alters alongside epidemiological, technological and social development. These factors influence the need for the healthcare workforce to possess relevant capabilities that meet evolving healthcare and consumer requirements.

From Hospitals to Higher Education

In Australia, initial nurse training began in the mid-1800s under an apprenticeship model of nursing (Godden, 2006). As part of healthcare reform, the need for more qualified nurses to manage advances in medicine and healthcare was identified (Godden, 2006). In 1868, Lucy Osborne introduced the United Kingdom's (UK's) Nightingale nurse training in Australia and laid the foundation for the apprentice model of nurse education (Godden, 2006).

The apprenticeship model was the mainstay of nurse education in Australia until the early 1980s. In this model, pre-service nursing programs were generally based in Schools of Nursing located in hospitals; nurses learned on the job and earned a wage. Programs were commonly 3 years in duration involving theory and practice and managed by hospital matrons (directors of nursing). Stripes on uniforms, caps or belts distinguished a student's year of practice, and assessment commonly involved examinations. On completion, new nurses were awarded a certificate. In this model, nursing programs and students' learning experiences were overseen by nursing administrators and the medical profession and driven by the service needs of hospitals, rather than for educational purposes (Cunich & Whelan, 2010). Eligibility for registration relied on passing a state-based examination at the end of the nurse training program. Over time, regulatory bodies were established in states and territories, which brought with it minimum standards of practice, education and accreditation processes that simultaneously guided and governed nurse education.

A key milestone in nursing came with the transfer of nursing to the higher education sector in 1985. Concerns about the ability of nurses to meet consumer needs in a rapidly changing healthcare environment, inequitable recognition of nursing among other health professionals and a need for greater professionalism led to the push for nurses to be educated through universities (Cunich & Whelan, 2010). The movement began as early as the 1930s in

Victoria but did not pick up momentum until 1962 with a submission to the Australian Universities Commission from the Royal Australian Nursing Federation recommending nurses be educated in colleges (Duffield, 1986). Subsequent efforts coincided with the criticism of the apprenticeship model of nurse education in 1968 by Dr Chittick, whose report recommended that nurse training be, like other healthcare professions, fully integrated within a tertiary education framework (Duffield, 1986). The Institute of Hospital Matrons opposed this approach, suggesting that models of nursing delivered in the tertiary sector did not produce a practitioner who was able to service the needs of hospitals on completion of their course (Institute of Hospital Matrons, 1969). This group proposed a combined university and hospital training model with 75% of the program being hospital based (Duffield, 1986). The rationale for this was that, while it was important to have educated nurses, the need to maintain cost-effective hospital staffing to meet service needs was greater. At the time, hospitals were staffed with nurse trainees and replacing these staff was considered a major operational and financial concern (Duffield, 1986). These concerns were underpinned by recurring labour shortages and exacerbated by high nurse resignation and trainee nurse dropout rates (close to 50% between 1962 and 1968). Levels of trainee nurse turnover were attributed to the status of nursing, wages, and the levels and condition of work (Duffield, 1986)—factors that continue to influence nurse retention rates (Dawson et al., 2014; Duffield, 1986).

Two subsequent government reports underscored the move to the tertiary sector: the Truskett report (Parliament of New South Wales, 1970) and the Sax report (Sax, 1978). The Truskett report was the outcome of an inquiry into nurse education commissioned by the Minister of Health. Recommendations included that the Minister for Education take responsibility for nurse education and that programs be delivered through Colleges of Advanced Education or Schools of Nursing with an entry-level standard being Higher School Certificate or Year 12 equivalent. State/territory-based inquiries in Victoria; Australian Capital Territory; South Australia; New South Wales (NSW) and the College of Nursing followed, with all providing similar recommendations (Duffield, 1986).

The Sax report (Sax, 1978) was the outcome of an inquiry into nurse education in the tertiary education sector and suggested that nurses be educated in the same setting as other health professionals. Sax (1978) identified issues with nurse education that parallel those echoed in contemporary inquires (Heath, 2002; Mason 2013): nursing education was not keeping pace with population growth, nor with societal, medical and technology

advancements and evolution. According to Sax (1978), hospital-based programs resulted in nurses who were 'restricted in outlook, resistant to change, and unable to cope confidently with the scientific and technical advances in medicine and the social problems of nurses' (p. 9). Key concerns Sax (1978, pp. 2–3) reported with hospital-based training included a shortage of qualified nurse educators (NEs) to address training needs, poor integration of theory and practice and hospitals having difficulty providing the essential knowledge for nurses to meet healthcare demand. Apprenticeship models of nursing were not successful in producing practice-ready nurses and were diminishing the status of RNs (Sax, 1978).

University Educated Nurses

Nurse education in Australia is now delivered through the tertiary and VET sectors in partnership with HCPs. In 1984, following persistent lobbying by nursing, educational and government groups, legislation was passed to enable the transfer of nurse education to the tertiary sector. The transfer began in 1985 in NSW and was completed in 1996 in Queensland (Duffield, 1986). The development of self-regulatory functions strengthened nursing and midwifery's professional standing (Willetts, 2015). From 1985 to 1993, individual state and territory nursing and midwifery regulation boards regulated the education and practice with a shared funding model between these (75%) and the federal government (25%) (Mason, 2013). The Australian Nursing and Midwifery Council was established in 1992 and worked with state and territory regulatory boards to established nursing codes, standards and competencies to guide professional practice and nurse education (Ralph, Birks & Chapman, 2015). Alongside New Zealand, the United States and Canada, nursing progressed to be an independent profession.

In 2010, driven by a need for a more mobile, coordinated and efficient regulation of the healthcare workforce, the *Health Practitioner Regulation National Law* came into effect (PC, 2005). This legislation brought together the regulation of health professionals through the *National Registration and Accreditation Scheme* (Cusack, 2015; Ralph et al., 2015). Under this law, AHPRA is responsible for the registration and accreditation of 14 health professions (AHPRA, 2015). Each health profession is represented by a national board that sets the standards and policies for regulation of their specific profession. A key objective of the national law is ensuring the high-quality education of health practitioners that produces safe, competent healthcare professionals. For nursing and midwifery, the establishment of a national broad provides a platform for national leadership and management in nursing and

midwifery, and collaborative approaches to funding and policy responsibilities, and promotes consistency in the regulation, standards and scope of practice of nurses and midwives to ensure a safe quality of nursing and midwifery care throughout Australia (Heath, 2002; NMBA, 2015).

Nurse Education and Regulation

Nursing regulation involves four interrelated elements: registration; codes and guidelines; complaints and notifications; and accreditation (Chiarella & White, 2013). In Australia, individuals must complete an accredited program of study to be eligible for registration as a RN. Approved programs of study for nursing involve the intersection of the *Health Practitioner Regulation National Law Act 2009* (ANMAC, 2012), the *Australian Qualifications Framework* (AQF), which is the national policy for education qualifications regulated in Australia (AQF, 2013), and the Tertiary Education Quality and Standards Agency, Australia's national regulatory agency for higher education. The NMBA is the national board for nursing and midwifery that works with other agencies and state and territory boards in the regulation, registration and accreditation of the nursing profession (NMBA, 2015).

Under the national law, BN nursing programs must meet accreditation standards approved by the NMBA and their appointed accreditation authority: ANMAC (NMBA, 2015). These bodies work collaboratively to ensure BN nursing programs meet the standards of healthcare and the profession (ANMAC, 2012). BN programs must comply with the *Registered Nurse Accreditation Standards 2012* to achieve accreditation (ANMAC, 2012). These standards outline the minimum requirements universities must meet to accredit their BN programs and are a useful guide for anyone involved in the education of nurses (ANMAC, 2012, p. 10).

Along with professional codes of practice and policies, the *Registered Nurse Standards for Practice* (formerly the *National Competency Standards for the Registered Nurse*) (NMBA, 2016b) inform the regulation and education of nurses and set the benchmark expectations for the provision of nursing care to the public. These standards communicate the minimum professional standards expected and required for registration as a nurse in Australia (NMBA, 2016b). Graduation from approved nursing programs indicates that the practice described in the standards has been achieved (NMBA, 2016b).

Nurse Education—Concerns and Challenges

In spite of the regulatory processes in place to prepare nurses for practice, concerns exist that NGRNs may not be adequately prepared for professional practice; that the education system is failing to bridge the theory–practice gap and prepare graduates with capabilities relevant for contemporary healthcare (Brown, Crookes & Iverson, 2015; Jackson, Daly, Mannix, Potgieter & Cleary, 2013; Ralph et al., 2015; Sax, 1978). The literature highlights four key areas undermining the quality and effectiveness of nurse education. First, while a regulatory framework governs the quality and standard of BN programs, diversity exists in program design and delivery (Brown et al., 2015; Ralph et al., 2015). Ralph et al. (2015) discuss the complexities associated with designing curricula to meet accreditation standards, noting that attempting to adhere to competing external and internal agendas, bias and a lack of resources and capability, can negatively affect the quality of curricula design. These authors highlight the need for ensuring accreditation standards and processes are transparent, evidence based and managed by individuals with proficiency in accreditation practices.

Second, the standards for practice that underpin competent performance are also open to interpretation (Windsor, Douglas & Harvey, 2012). While these professional standards are used to develop nursing curricula and determine competence, articulating these in education and practice has been problematic (Chiarella, Thoms, Lau & McInnes, 2008; Windsor et al., 2012). Further, the standards need to accurately reflect contemporary nursing practice. Extensive timeframes are evident between updates of professional codes and standards that are out of step with the rapid changes in health and healthcare (Ralph et al., 2014). For example, the NMBA competency standards for the RN were developed in 1990, revised 15 years later in 2004/5 (NMBA, 2006) and again 10 years later with the release of the RN standards for practice (NMBA, 2016b).

Third, despite regulation, approved programs demonstrate differences in delivery and content (Brown et al., 2015; Ralph et al., 2014). Consequently, UGNs' experiences and levels of performance vary and NGRNs enter practice with varying levels of capability. National accreditation enables NGRNs to work anywhere in Australia; however at a state and territory level, different political, economic and organisational factors influence how healthcare is managed and delivered (AIHW, 2016a). Finally, challenges exist in the capacity for higher education and the healthcare industry to accommodate financially viable, relevant clinical placement experiences across the depth and breadth of nursing programs

and contexts (Mason, 2013; National Health Workforce Taskforce, 2009). Growth in enrolment numbers for health professional programs has increased the need for clinical experience places (Mason, 2013). Capacity concerns have grown with competitive negotiations for clinical places making it difficult to secure positions (Mason, 2013). Successful clinical placement experiences rely on a coordinated, cooperative approach between the tertiary institution and the healthcare facility, and adequate human, financial and workplace resources (Mason, 2013). However, increased costs associated with facilitating and managing placements and competing agendas create strain and tension in both higher education and healthcare facilities that can undermine collaboration (Mason, 2013).

2.4.4 New Graduate Registered Nurse and Practice Readiness

Perspectives about NGRN practice readiness were prevalent in national and international literature related to NGRNs' education and preparation, their first year and transition experiences and the workplace environment in which NGRNs commence practice. The following sections focus on these perspectives.

New Graduate Registered Nurse Preparation and Practice Readiness

Being practice ready is an anticipated outcome of the educational preparation of nurses. However, the issues discussed in this chapter culminate in an education system that has been challenged to prepare practice-ready NGRNs with capabilities relevant for contemporary healthcare. As a result, a theory–practice gap is said to exist between what is taught in the university and practised in the clinical setting (Ralph et al., 2014). The gap arises when NGRNs unsuccessfully attempt to merge pre-registration education with practice (Clark & Holmes, 2007; Maben, Latter & Clark, 2006). As a result, nurse education programs are described as failing to prepare practice-ready NGRNs with the necessary skills to apply knowledge to practice, manage their new responsibilities and adapt to the environment (El Haddad et al., 2013; Missen et al., 2015; Rush, Adamack, Gordon, Lilly & Janke, 2013; Watt & Pascoe, 2013; Wolff, Pesut et al., 2010).

The existence of a theory–practice gap is a longstanding issue that continues to haunt nurse education (Armstrong, 1974; Benner, Sutphen, Leonard & Day, 2010; Hickerson, Taylor & Terhaar, 2016; Maben et al., 2006; Missen et al., 2015; Monaghan, 2015; Ralph et al., 2014, Sax, 1978). Berkow Virkstis, Stewart, and Conway (2008) refer to this gap as a preparation–

practice gap with respect to the deficits in 'specific nursing competencies' that NGRNs demonstrate in clinical practice (p. 17). As discussed, Ralph et al.'s (2014) exploration of Australian UGN education curricula identified a significant preparation–practice gap between current healthcare and societal trends and what exists in Australian nursing curricula (p. 1). Benner et al. (2010) describe this gap as the 'education–practice gap' (p. 4) and the result of clinical practice settings not being able to 'adopt and reflect' with what is being taught in the education setting. Benner et al. (2010, p. 4) suggest this gap has altered over time to become a 'practice–education gap', representing the inadequacy of nurse education to 'keep pace with rapid change in practice' and prepare new nurses with the capability to manage evolving contemporary healthcare (Benner et al., 2010, p. 5).

Attribution of the cause and blame for this gap often relates to nurses either having too much theory and not enough clinical experience or too much clinical and not enough theory (Benner et al., 2010; Monaghan, 2015). Many suggest the gap is the result of the transfer of nursing education from hospitals to higher education institutions; however the theory–practice gap existed for new nurses well before this move (Armstrong, 1974; Sax, 1978). As discussed, a key argument for transfer of nursing to the higher education sector related to the theory–practice gap and the inadequacy of the apprentice model of education to sufficiently prepare new nurses for practice (Sax, 1978). Other factors contributing to the gap include inadequate workplace support for UGNs and NGRNs, and high stress and low morale of both staff and NGRNs (Candela & Bowles, 2008; Fink, Krugman, Casey & Goode, 2008; Maben et al., 2006; Wolff, Pesut et al., 2010).

Irrespective of the terms or reasons for the gap, studies examining the perspectives of NGRNs and employers describe shortfalls and skills deficits in NGRNs' performance that suggest NGRNs are not adequately prepared for work in the clinical environment and, consequently, not practice ready (Freeling & Parker, 2015; Hegney et al., 2013; Kelly & Ahern, 2009; Milton-Wildey et al., 2013; Missen et al., 2014b, 2015; Parker et al., 2014; Purling & King, 2012; Waters et al., 2012; Watt & Pascoe, 2013). As a result, NGRNs may have more intense, challenging transition experiences with high levels of stress and patient safety concerns.

New Graduate Registered Nurse Transition and Practice Readiness

There is ample evidence of the multiple challenges NGRNs experience during their first year of practice as they make their transition from student to professional RN (Duchscher,

2008; Greenwood, 2000; Kralik, Visentin & Vanloon, 2006; Kramer, 1974; Kramer et al., 2011, 2009; Laschinger et al., 2016; Phillips, Kenny, Esterman & Smith, 2014). NGRNs often struggle to adapt to their new responsibilities and environment and have perceived skills deficits that make this process more difficult. NGRNs are considered unprepared for this transition and described as not being practice ready (Hegney et al., 2013; Kelly & Ahern, 2009; Missen et al., 2015; Newton & McKenna, 2007; Watt & Pascoe, 2013).

Transition is an inevitable process that occurs when an individual undergoes change (Duchscher, 2008). According to Duchscher's (2008) transition theory, a NGRN's transition is a 12-month non-liner process in which the NGRN evolves through a series of stages of 'doing, being, and knowing' to become a competent RN (p. 443). This first year is described as a period of steep learning and adjustment that can produce significant stress and a range of emotional responses (Duchscher, 2008; Kramer, 1974; Kramer et al., 2011). Transitional changes are characterised by fluctuating 'physical, intellectual, emotional, developmental, and sociocultural' reactions that include high levels of anxiety, fear, disappointment and disillusionment, and feelings of inadequacy (Duchscher, 2009, p. 1105). If not managed effectively these can negatively affect a NGRN's performance and first year experience with long-term outcomes including burnout and attrition (Ashton, 2012).

NGRNs are described as experiencing different types of 'shock' during this transition year that account for these responses. Initially NGRNs experience 'reality shock' (Kramer, 1974) where they are confronted with a disparity between what they prepared for and expected from their new situation and the actual reality of the situation. This realisation is unsettling for NGRNs where they can become overwhelmed and disillusioned as they attempt to come to terms with this realisation. Duchscher (2009) built upon Kramer's reality shock to extend this to 'transition shock' in response to substantial personal and professional changes NGRNs experience during the first 3-4 months as they continue to grow and adapt to their new role (Duchscher, 2009, p. 1105).

New Graduate Registered Nurses' Workplace and Practice Readiness

Further research related to NGRNs' transition experiences led Kramer et al. (2011, p. 3) to propose that NGRNs also experience 'environmental reality shock' (ERS). Defined as the 'impact of misaligned expectations and perceptions of the professional practice work environment' (Kramer et al., 2011, p. 3), ERS accounts for NGRNs' responses to the workplace environment. Kramer et al. (2011) assert that while measures to improve

NGRNs' understanding and expectations of their RN role have progressed, a dissonance exists in NGRNs' expectations and experiences of the workplace environment. This dissonance is an additional source of stress for NGRNs. Ashton (2012) also explored NGRNs' transition experiences and found that some of the responses NGRNs demonstrated were reactions to factors in the workplace environment.

Factors in the workplace can be either antagonistic or supportive (D'Ambra & Andrews, 2014; Kramer et al., 2011; Parker et al., 2014). Adapting and assimilating into this new environment and healthcare team is known to be stressful for NGRNs (Cubit & Ryan, 2011; Duchscher, 2008; Missen et al., 2014a; Parker et al., 2014). In the workplace, NGRNs can experience confusion and conflict when their education clashes with clinical practices in the workplace (Dyess & Sherman, 2009; Parker et al., 2014), frustration when access to information or resources is time consuming and complex (Dyess & Sherman, 2009) and disorganised when workloads and staffing consistently fluctuate (Higgins, Spencer & Kane, 2010; Malouf & West, 2011). Access to support can be problematic where support may be unavailable or unhelpful and disconcerting (Clark & Springer, 2012; Cubit & Ryan, 2011; Laschinger et al., 2009; Parker et al., 2014). NGRNs are also known to experience workplace incivility (Brunetto et al., 2013; D'Ambra & Andrews, 2014; Laschinger et al., 2010; Rush, Adamack, Gordon & Janke, 2014). Workplace incivility is characterised by 'low-intensity deviant behaviour with intent to harm the target, in violation of workplace standards or consideration of respect for others' (Laschinger et al., 2009, p. 378). Professional interactions shape role adaptation, clinical performance and competence (Benner, 1984; Benner et al., 2010; Duchscher, 2008; Kramer et al., 2011; Newton & McKenna, 2007) and when interactions are uncivil, they can compromise a NGRN's performance and progress (Cubit & Ryan, 2011; Duchscher, 2008; Parker et al., 2014; Phillips et al., 2014; Walker & Campbell, 2013). NGRNs lack confidence to seek help and act independently, leaving them feeling inadequate as a RN (Ashton, 2012; Higgins et al., 2010; Missen et al., 2015).

Like Duchscher's (2009) transition shock timeframe, Kramer et al. (2011) found that ERS scores peak at 4 months and stabilise for most nurses at 8–12 months. ERS coupled with transition shock and the knowing realisation that they are unable to respond at the level they thought they could or as a competent RN, compounds the challenges associated with their clinical development. NGRNs attempt to learn and manage their new responsibilities, while adapting to significant personal and professional change in developing their clinical practice.

Collectively, these factors suggest that the NGRN first year experience and transition to a new role is simultaneously turbulent and transformational, influenced by personal, professional and environmental factors that many NGRNs and clinicians suggest leave NGRNs inadequately prepared for practice. When these experiences are not managed and remain negative, the cumulative effect results in high levels of job dissatisfaction, stress and burnout that lead to NGRN attrition (Beecroft et al., 2008; Cubit & Ryan, 2011; Hegney et al., 2013; Laschinger et al. 2009; Milton-Wildey et al., 2013; Walker & Campbell, 2013). Given the forecasted nursing shortages, loss of NGRNs early in their careers will lead to greater burden and adverse consequences for future healthcare contexts.

2.4.5 Conceptualising Practice Readiness

While research investigating educational preparation, transition and workplace experiences suggests NGRNs are not adequately prepared and practice ready, definitions of practice readiness and research to clarify what 'practice readiness' means are minimal (Walker & Campbell, 2013). Papers discussing, and research conceptualising, practice readiness include four Australian studies (Caballero et al., 2011; Walker & Campbell 2013; Walker, Storey, Costa & Leung, 2015; Walker et al., 2013) and two international studies (Wolff, Pesut et al., 2010; Wolff, Regan et al., 2010); one literature review (Caballero & Walker, 2010); and one scholarly paper (El Haddad et al., 2013). Studies use a mix of qualitative and quantitative designs with survey research dominant. Of the six research studies clarifying practice readiness, a limited number of authors and participants or geographic locations is evident. A table of these studies, which include a Critical Appraisal Skills Programme (CASP) analysis is provided in Appendix 1.

Merriam-Webster (2015) defines 'readiness' as the quality or state of being ready or prepared mentally or physically for some experience or action. Readiness in the context of practice refers to the ability to carry out or engage in a profession (Merriam-Webster, 2015). The term practice ready is often used synonymously with 'readiness for practice', 'job readiness', 'work ready' and being 'fit for practice' and is historically aligned with the phrase 'hit the ground running' (Greenwood, 2000; Wolfe, Regan et al., 2010). These terms are common in discussions about the preparation and performance of professionals entering their selected profession (Caballero & Walker, 2010).

Caballero et al. (2011) define work ready as 'the extent to which graduates are perceived to possess the attitudes and attributes that make them prepared or ready for success in the work environment' (p. 42). In the context of nursing, Wolf, Pesut et al. (2010, p. 187) describe practice readiness as 'the ability to move seamlessly into practice' and the UK Nursing and Midwifery Council (NMC) (2015) defines readiness as fitness to practice, which is nurses having 'the skills, knowledge, good health and good character to do their job safely and effectively'.

In a project aimed at preparing nurses for the future, the Victorian Government (2006b) consider practice ready as synonymous with work ready and propose the following definition: 'at registration, a practice-ready graduate nurse (Division 1 and 2) is able to provide safe, competent and collaborative nursing practice, informed by a sound knowledge base', noting that practice readiness means different things to different people (p. 2). Walker and Campbell (2013) state that NGRN work readiness encompasses 'the extent to which graduates are perceived to possess the skills and attributes that render them prepared for success in the workplace', highlighting work readiness as an indicator of graduate's potential performance and career progression (p. 1490).

Part of the challenge with understanding practice readiness is determining the skills, knowledge and attributes that represent practice readiness for NGRNs. Practice readiness is described as a complex, multidimensional construct where skills required to be practice ready go beyond discipline-specific competencies (Patterson, Curtis & Reid, 2008; Walker & Campbell, 2013; Walker et al., 2013; Wolff, Regan et al., 2010). With a view to understanding and assessing work readiness, Caballero and Walker (2010) note the lack of clarity and conceptualisation of what defines work readiness (p. 17). Their summary of literature examining work readiness identifies a range of concepts that encompass core or generic and transferable skills including critical thinking and problem-solving ability; personal attributes such as motivational, interpersonal and leadership skills; and job-specific skills and competencies (p. 18). Wolff, Regan et al. (2010) explored the conceptual meaning of readiness as it pertains to Canadian nurses in education, practice and regulatory sectors, and found similar complexity. For Wolff and colleagues, four themes represented practice readiness (2010, p. 6):

1. having a generalist foundation and some job-specific capabilities
2. providing safe client care

3. keeping up with the current realities and future possibilities
4. possessing a balance of doing, knowing and thinking.

Advocating for a shared understanding of the concept, Wolff, Pesut et al. (2010) describe practice readiness as being fluid because of its potential to change over time and context, with much dependent on individual perspectives and the nature of the work environment. According to Wolff, Pesut et al. (2010), individual perceptions are grounded in 'historical, social, economic and political contexts' and 'a complex matrix of factors' contributes to how practice readiness is conceptualised (p. 191). Wolff, Pesut et al. (2010) conclude that perceptions of practice readiness are shaped by nurses' realities and should be understood within the context of what readiness means to nurses within the various sectors. Further, Wolff, Pesut et al. (2010) suggest that different perceptions of practice readiness can lead to varied understandings and expectations of NGRNs' education, performance and readiness across healthcare contexts and between organisations (Wolff, Pesut et al., 2010; Wolff, Regan et al., 2010).

Research by Caballero et al. (2011) that aimed to develop a tool to assess the work readiness of graduate professionals identified similar themes. These authors describe four work readiness constructs for graduate professionals to measure their Work Readiness Scale (WRS) (Caballero et al., 2011):

1. social intelligence
2. organisational acumen
3. work competence
4. personal characteristics.

Comparable outcomes were also found in a qualitative study of 41 graduate health professionals, which included nurses and organisational representatives from an Australian regional hospital (Walker et al., 2013). Specific capabilities associated with each category were identified, including communication and teamwork; knowledge of the organisation; maturity and professional development; responsibility, clinical skills, experience and confidence; and resilience, flexibility and stress management (Walker et al., 2013, p. 118). For health professionals, these capabilities can influence job satisfaction, retention and the ability to manage transition experiences (Caballero et al., 2011; Walker & Campbell, 2013; Walker et al., 2013).

With the aim of validating the WRS for graduated nurses (WRS-GN), Walker et al. (2015) adapted the WRS specifically for NGRNs and over a 3-year period with 450 NGRNs found excellent reliability and initial construct validity of WRS-GN, further supporting the four factor construct described by Caballero and colleagues as indicative of practice readiness for NGRNs (Walker et al., 2015).

The dialogue about NGRNs being practice ready is longstanding, global and likely to continue (Greenwood, 2000; El Haddad et al., 2013). Parallel with expanding healthcare systems, healthcare professionals will need to be equally progressive in developing the capabilities for safe standards of care. To date, evidence suggests that models of nurse education (hospital and university) have not been able to reduce the theory–practice gap and prepare practice-ready NGRNs. For a range of reasons, NGRNs have negative experiences and are leaving the profession. With predicted workforce shortages, there is an imperative for universities and HCPs to adequately prepare and retain those new to the nursing profession as a key priority.

2.5 Linking the Literature and Research—Issue Questions

The literature review provides guidance on how and what to explore about NGRN practice readiness to produce a comprehensive understanding of practice readiness in Australia. A series of issue questions was generated to focus the research aim, questions and design have been formulated (Stake, 2006). Simons (2009, p. 32) refers to these as ‘foreshadowed issues’, noting that developing issue questions can contribute to researcher reflexivity and being transparent about one’s initial thinking around the topic. The relationship between the research questions and issues questions are summarised below in Table 3. The issue questions are presented in Table 4.

Table 3: Relationship of research questions to issue questions

Research question		Issue question
RQ 1:	How do HCPs describe NGRN practice readiness?	1, 2, 3, 5, 6, 7, 8
RQ 2:	What factors influence how Australian HCPs perceive and determine NGRN practice readiness?	1, 2, 3, 4, 5, 6, 7, 9, 10
RQ 3:	How do NGRN demonstrate practice readiness?	1, 2, 3, 4, 5
RQ 4:	How do HCPs' interactions with NGRNs affect NGRNs' ability to demonstrate practice readiness?	4, 5, 6, 9, 10

Table 4: Literature review—Issue questions

Issue question		Topic
Issue 1:	Much of the research literature indicates that healthcare stakeholders or providers consider that NGRNs are 'not ready for practice' and that HCPs 'expect' them to be able to 'hit the ground running'. To what extent is this a true reflection of HCP perceptions and needs? (A need to clarify perceptions and what they mean by 'not ready'—leads to what makes them ready?)	Practice readiness Healthcare RN preparation
Issue 2:	NGRNs are prepared for their role as RNs according to professional and legislative standards designed by the profession. To what extent are these relevant and/or used as a guideline to determine if a NGRN is ready for practice?	RN preparation
Issue 3:	In light of the NMBA (2006) competency standards, what factors (knowledge, skills, attributes, behaviours) do HCPs consider are important to begin practice (be practice ready) for healthcare in Australia today?	RN preparation Healthcare context
Issue 4:	To what extent does a HCP context of practice influence perceptions of NGRN ability to perform competently in their role as a RN—does this guide their assessment of performance and determination of being practice ready (context of practice influence)?	Practice readiness Healthcare context Transition
Issue 5:	Considering the variations in context of practice, what are the basic knowledge skills, behaviours and attributes that HCPs believe are required for a NGRN to be practice ready (definition & defining characteristics)?	Practice readiness characteristics Healthcare Transition
Issue 6:	Considering specific contexts of practice how well prepared is a NGRN for practice in this area? Does the context and culture of the workplace influence how a NGRN performs?	Practice readiness Healthcare context
Issue 7:	Considering that, theoretically, the role transition is a gradual staged process and can take up to 12 months (Duchscher, 2008), what do HCPs expect of NGRNs when they first begin (3 months) in their role as a RN (mismatched expectations, link to transition)?	Expectations Transition

Issue question		Topic
Issue 8:	If theoretically NGRNs develop competence over time and commence their role as a RN as a novice (Benner, 1984), what do HCPs expect of NGRNs' competence level in clinical practice when they first begin (3 months) in their role as a RN (mismatched expectations, link to transition)?	Transition
Issue 9:	How do HCPs determine that a NGRN is ready for their role as a RN? What criteria do they use and at what point do they decide this? (How do they conceptualise and determine NGRN practice readiness; influencing factors?)	Practice readiness Healthcare RN preparation
Issue 10:	Considering that role transition includes both transition to the professional role as a RN and the clinical role as a competent clinician, are they ready to practice as a RN (responsible and accountable professional) and competent to perform in a clinical role? If not why not, what are they ready for and when do they think this happens? (How do they conceptualise and determine NGRN practice readiness; influencing factors; characteristics?)	Practice readiness Healthcare RN preparation

2.6 Chapter Summary

In this chapter the context, concepts and issues associated with NGRN practice readiness have been presented. Discussion about NGRN practice readiness emerges in literature related to educational preparation, NGRN transition experiences and workforce retention. This review of the literature highlights the importance of understanding practice readiness as being significant to the provision of a safe, quality care and the long-term sustainability of healthcare and the nursing profession. Chapter 3 presents a detailed exploration of the methodology used in this study and the specific design chosen to explore HCPs' perspectives of practice readiness as it pertains to NGRNs in the Australian context.

Chapter 3: Methodology

3.1 Introduction

In the previous chapters the aim, context of the study and factors that shaped its development were discussed. The purpose of this chapter is to explain and justify the research design and philosophical foundations that underpin the study. Demonstrating an understanding of the methodology works towards establishing the credibility of the researcher and justifies the alignment between the research aim, methodology and methods or congruence of the research design. The chapter begins with a description of the case study research design used in this study and the rationale for its choice. Constructivism and symbolic interactionism are presented as the philosophical framework and how they collectively inform the study is explained. The chapter concludes with two publications that explicate the history, foundations, and methodological orientations of case study research with the aim of further explaining and validating the choice of case study as the methodology for this study.

3.2 Methodology Employed for This Study

The aim of this study was to explore HCPs' perceptions of NGRN practice to describe practice readiness and explain the process by which NGRNs are determined to be practice ready. Consideration of the most appropriate methodology to address this aim led the researcher to employ an interpretive approach using a qualitative case study design, underpinned with a theoretical framework of constructivism and symbolic interactionism.

Qualitative case study enables the researcher to explore a topic to understand, generate knowledge and describe, rather than to measure or test outcomes (Creswell, 2014; Merriam, 2009; Miles, Huberman & Saldana, 2014). Case study provides the possibility of drawing on multiple perspectives to examine the complex nature of the selected phenomena as it unfolds in its natural context (Merriam, 2009; Simons, 2009; Stake, 1995, 2006; Yin, 2014). In doing so, case study affords the opportunity to develop a holistic, comprehensive understanding of a phenomenon (Creswell, 2014; Merriam, 2009; Simmons, 2009; Stake, 1995, 2006; Yin, 2014).

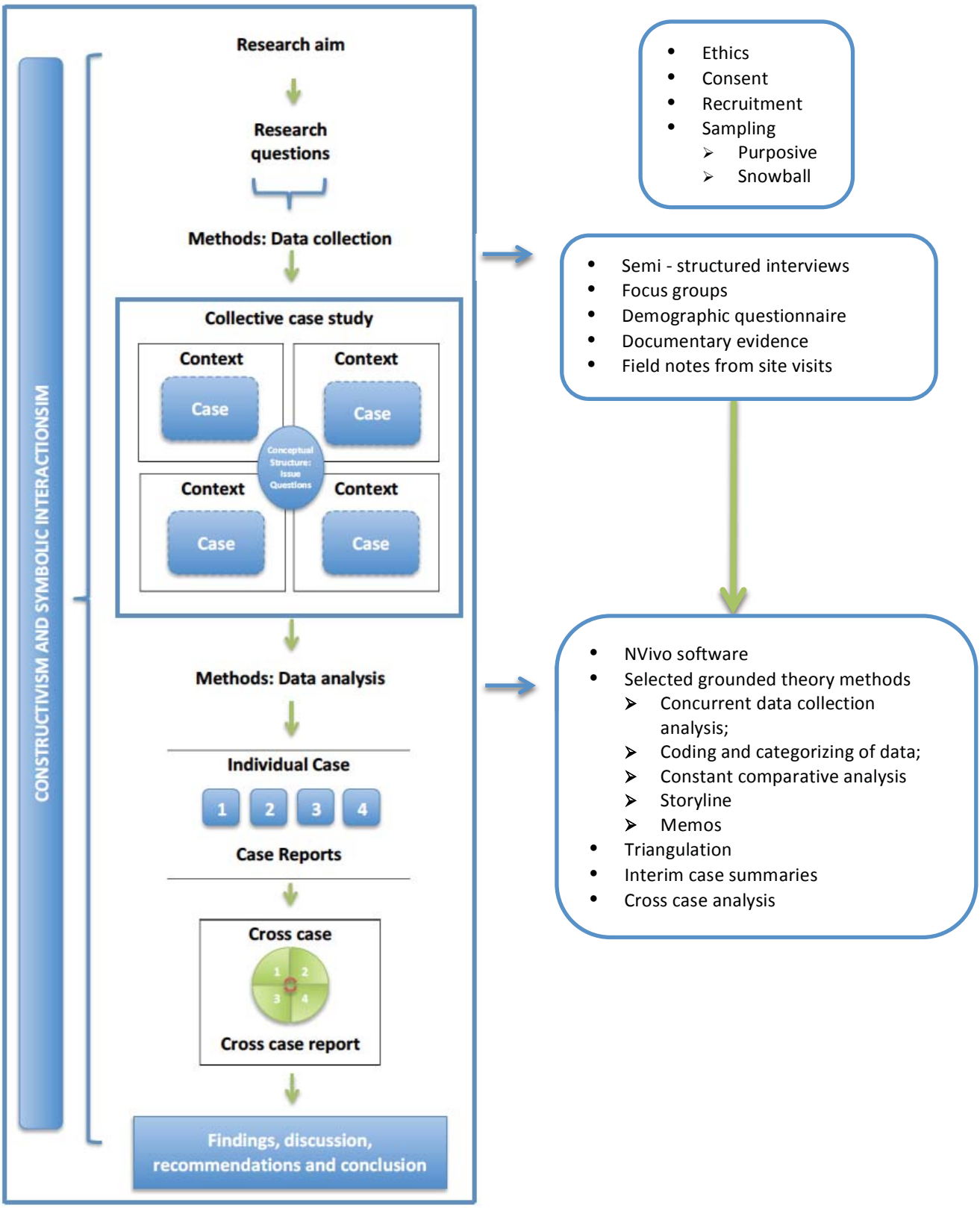
3.2.1 Collective Instrumental Case Study

Drawing on the constructivist methodology described by Stake (1995, 2006) a collective instrumental case study design was employed. In an instrumental case study design, cases are studied 'as a way to understand something else'; to explore and understand an issue or phenomenon of interest beyond the cases themselves (Stake, 1995, p. 3). In a collective case study, multiple cases are investigated and findings are brought together collectively to achieve this goal (Stake, 2006). Stake (2006) advises that in using multiple cases 'the binding concept, the phenomenon of interest in needs to be prominent in these cases' and 'the cases become the opportunities to study it' (p. 24). Further, according to Stake (2006, p. 22) the benefits of multiple cases are best achieved with 'a minimum of four cases and no more than ten'. Equally Creswell (2013, p. 101) recommends limiting a multiple case study to four or five cases to allow for adequate exploration of each case without compromising its complexity or being overwhelmed by the process and missing relevant data.

For this study four bounded cases (healthcare institutions) were investigated individually and collectively to gain more knowledge and understanding of NGRN practice readiness from the perspective of Australian HCPs. Constructivism (Lincoln, Lynham & Guba, 2011) and symbolic interactionism (Blumer, 1969) were used as a theoretical framework to help explain how perception, context and practice intersect to conceptualise descriptions and meanings of NGRN practice readiness. Using this theoretical framework supported the aim of this research: seeking the participants' point of view and gaining an understanding about how these views were developed (Blumer, 1969; Lincoln et al., 2011; Stake, 1995; Yin, 2014). The image in Figure 3 provides an overarching view of the research design. As described by Yin (2014, p. 50), the boundaries between the case and context can be blurred as represented by dotted lines in the design.

The case study design utilised exemplifies a qualitative, constructivist paradigm and an exploratory, inductive approach, which aims to 'gain understanding by interpreting subject perceptions' (Lincoln et al., 2011, p. 102). Employing this type of research design is useful for a number of reasons. First, following Stake's (1995, 2006) constructivist methodology acknowledges an ontological premise of relativism—reality is locally and specifically co-constructed and hence the researcher needs to purposefully seek multiple, diverse perspectives and co-created findings while adopting a subjectivist stance (Lincoln et al., 2011, p. 100).

Figure 3: Research design



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Second, Stake's (2006) approach allows for flexibility in designing the study for exploration, interpretation and description of meaning, and holds the intent to illuminate understandings through the process of immersion in context and interaction with participants (Boblin, Ireland, Kirkpatrick & Robertson, 2013; Stake, 2006). To fully understand practice readiness as the focus of this study, the phenomenon must be studied within its context. A constructivist perspective also recognises that knowledge is generated and allows for the primary researcher's active role in the interpretation and construction of knowledge.

Third, this research design supports the use of multiple data sources and methods in the research process (Flyvbjerg, 2011; Merriam, 2009; Stake, 2006; Yin, 2014). Practice readiness is a complex phenomenon associated with a range of factors (Caballero et al., 2011; El Haddad et al., 2013; Walker & Campbell, 2013; Walker et al., 2013; Wolff, Pesut et al., 2010; Wolff, Regan et al., 2010). Using multiple methods provides the avenue to generate a holistic and comprehensive investigation to understand the phenomena being explored.

Fourth, multiple case studies are advantageous as they can enable comparisons within the data set that highlight similarities and discrepancies that contribute to the depth, breadth and validity of the research findings (Stake, 2006; Yin, 2014). Investigation across the different settings provides diversity in perspectives and consequently a deeper understanding of the phenomena. Further, exploring the phenomena in different settings offers more opportunity to provide 'a good picture of causations', explain issues and confirm assertions (Miles et al., 2014; Stake, 2006; Yin, 2014). This reason holds relevance for this study whereby HCPs' perceptions about NGRN practice readiness vary as contextual factors associated with the healthcare setting and geographic locations differ (Wolff, Pesut et al., 2010). The use of multiple cases provides more opportunity to understand and clarify the influence of

contextual elements on perceptions of NGRN practice readiness and identify those that are particularly important for HCPs.

Finally, using multiple cases and sources of evidence can support analytic generalisations and strengthen the credibility of the products of the research (Flyvbjerg, 2011; Yin, 2014). Case study provides an avenue to investigate issues through immersion in the participants' context. This closeness, however, presents one of the major criticisms of case study methodology: the limited capacity for objectivity that meets the scientific merits of generalisability (Farquhar, 2012; Flyvbjerg, 2011; Simons, 2009; Yin, 2014). Quantitative researchers find the levels of subjectivity in case study a concern, believing that it permits undue influence on the research process and undermines the validity of the research results (Farquhar, 2012; Flyvbjerg, 2011; Simons, 2009; Yin, 2014).

As a limitation, the lack of generalisability is of concern where only one case or method of data generation is used. When coupled with small sample sizes, which are common in case study research, the methodology attracts further criticism for its inadequacy to generalise and represent larger populations (Flyvbjerg, 2011; Stake, 2006; Yin, 2014). Nonetheless, according to Yin (2014) generalisations in case study research can be made but are analytical as opposed to statistical; therefore using multiple cases can strengthen analytic generalisations. Similarly, Johansson (2003) also discusses generalisations from case study as analytical where the use of the principles of deduction, abduction and induction enables some level of generalisation. Simons (2009) also suggests there are ways to make suppositions from case study research that can be applicable to other contexts, thus applying low levels of generalisation. This form of generalisation comes from a tacit perspective in that suppositions are more understood or implied through an understanding of their link to other situations without being formally stated or proposed. To facilitate tacit generalisations, the case study is presented in a way that the reader can 'vicariously experience what was observed and utilise their tacit knowledge in understanding its significance' (Simons, 2009, p. 23). Stake (1995) refers to this as naturalistic generalisation where generalisations develop intrinsically and considers that with sufficient sensory description and detail, the reader can take the findings of the research and apply them to their own situations or contexts. Reproducing and confirming findings across varied contexts and groups has the potential to yield 'systematic, confirmatory evidence' (Polit & Beck, 2010, p. 1454) to enhance these forms of generalisation, lead to greater validity, reliability and thus credibility of the findings (Polit & Beck, 2010; Stake, 2006; Yin, 2014). Collectively, employing the

measures described above, while not foolproof, provide foundations for generalisation—conscious or otherwise—when complemented by a robust research protocol.

3.2.2 Constructivism and Symbolic Interactionism

The philosophical orientation for this collective instrumental case study is constructivism (Lincoln et al., 2011). Symbolic interactionism (Blumer, 1969) was used as the theoretical lens to clarify specific outcomes, events or situations and more specifically, explain how perception, context and practice intersect to conceptualise descriptions of NGRN practice

Constructivism

As a worldview, constructivism proposes a relativist ontology and subjective, transactional epistemology where the primary aim in the inquiry is 'to gain understanding by interpreting subject perceptions' (Lincoln et al., 2011, p. 102). Relativist ontology assumes a belief in multiple truths or realities and that these realities are co-constructed (Killam, 2013, p. 19). Truths are therefore subjective, dynamic and contextually related where individuals can hold many mental constructions of reality (Lincoln & Guba, 2013). Underpinned with relativist ontology, constructivism assumes a belief in multiple legitimate accounts of reality and that the truth of these accounts rely on one's engagement with this reality.

This ontological position implies a certain epistemological position. An epistemology explains 'how we know what we know' (Crotty, 1998, p. 3). A constructivist position assumes that 'knowledge arises through a process of active construction' (Fischer & Mascolo, 2005, p. 49). Knowledge and meaning are created through lived experiences and societal interactions where an active, constructive process occurs in the mind of the individual and is 'highly person- and context-specific', hence transactional, subjective and co-constructed (Lincoln & Guba, 2013, p. 40). Individuals create mental constructions of reality that are shaped by experiences and culture and influenced by a person's perceptions and interpretations (Lincoln et al., 2011). In regard to axiology, in this type of research there is an assumption that the researcher's values exist, are embraced as part of the inquiry process and need to be made transparent (Lincoln & Guba, 2013; Lincoln et al., 2011). The researcher acknowledges that their background and experiences influence the inquiry process and shape their interpretations of the data. Making these values explicit in the research process then explicates their influence (Hiles, 2008). This approach strengthens the

ethical context of the study and contributes to the quality of the research outcomes (Lincoln et al., 2011).

With respect to methodology, a constructivist researcher values the subjective lived experience of individuals and the complexity inherent in these experiences. Such a position is 'naturalistic and interpretive' (Morrow, 2007, p. 214) in its intent. Qualitative methodology framed from a constructivist perspective is characteristically hermeneutic and dialectical where responses are interpreted, compared, contrasted described and/or explained and presented as quality arguments, discussion and narration rather than with statistical accuracy (Lincoln et al., 2011). In conducting research from this perspective, the researcher's intention is to seek out and interpret the participants' constructions and experiences (Lincoln & Guba, 2013) of a phenomenon. As the instrument of the research, the researcher is a collaborative partner with participants in constructing meaning (knowledge) that eventually represents a consensus of the participants' understanding of the reality (phenomena under investigation) (Creswell, 2014; Lincoln et al., 2011). Together the researcher and participants co-create new knowledge, and 'a new shared reality' (Lincoln & Guba, 2013, p. 41). The nature of a constructivist position is that high levels of subjectivity are present throughout all stages of the research resulting in the researcher needing to employ a reflexive stance and remain cognisant and transparent about their influence throughout the process (Creswell, 2014; Lincoln et al., 2011; Miles et al., 2014).

Symbolic Interactionism

Symbolic interactionism is a sociological theory and philosophical perspective that focuses on the role of human interaction in how groups and individuals create meaning and act in different situations (Blumer, 1969; Davetian, 2010; Oliver, 2012). Symbolic interactionism is useful to understand societal complexities and the 'human world' (Crotty, 1998, p. 3). Theoretically, it provides a framework to view social situations to understand human behaviour, communication and meaning making, the creation of culture, complex societies and social organisations (Blumer, 1969; Davetian, 2010; Oliver, 2012; Williams, 2008). In research studies guided by symbolic interactionism, the methodological imperative is the examination and understanding of perceptions, interpretation, the ways people interact and the subsequent interactions that lead to action. Blumer (1969) states that to do this, a phenomenon must be examined in action in its naturalistic setting: the researcher must be prepared to be in the world rather than being a 'detached observer' (p. 86).

Primarily, symbolic interactionism is based on the premise that humans behave towards things or objects according to the meanings they have for them (Blumer, 1969; Williams, 2008). This relationship between the subject (individual) and object (reality) is significant to the formation of knowledge. In its specificity, symbolic interactionism focuses on the interactions between people (actors), the environment (non-actors) and the human factors embodied in the process (Blumer, 1969). According to symbolic interactionism, meaning making is a social process: how we interact, interpret and assign meanings guides our actions and subsequently creates our social reality (Williams, 2008).

Two key concepts are operationalised within these principles: symbol and interaction. Symbols include objects in the environment that have been created by individuals and assigned a meaning. Interaction refers to the interpersonal communication that conveys the meaning of a symbol (Williams, 2008, p. 849)—the central concept being that interaction and symbols shape meaning and action, with perception and interpretation as the primary functions in the process. Through interaction, 'individuals produce common meanings of symbols' (Blumer, 1973, p. 84). The perceptual frame is formulated on past and present experiences of the social world and interpretation is twofold: within the self (as a reflexive process of mental conversations) and with others. Self-interpretations rely on the belief that humans have the capacity to think and thought processes enable mental conversations (Blumer, 1973; Williams, 2008). Meaning making (knowledge) is, therefore, a reciprocal process of self-reflection and social interaction where the actions of others influence interpretations (Blumer, 1973, p. 84).

From this perspective reality, society, culture and self are constructed through self-reflection, action and interaction: 'Through symbolic interaction, human beings construct, share, resist, modify, or reject various aspects of the social world' (Williams, 2008, p. 849). Reality is a product of one's interpretation and the meaning and human behaviour that occurs from interaction (Corbin & Strauss, 2008). The nature of human responses and the variety of cognitive, emotional and behavioural interactions between individuals and the environment work towards creating a society and shaping reality (Corbin & Strauss, 2008). Individuals collectively create society through an ongoing, continuous interchange of action, interaction and interpretations. As a result, individuals become 'active creators of symbols and culture' (Williams, 2008, p. 849). Knowledge is therefore cumulative, based on what has been discovered previously, and continues to influences one's view of the world. The truth may be relevant and accurate in one moment but may change later. In this way actions

representing knowing are intertwined with the knower's perspective—they cannot be separated (Corbin & Strauss, 2008, p. 4).

Often applied within ethnographic, interpretive and grounded theory approaches (Birks & Mills, 2015; Chamberlain-Salaun, Mills & Usher, 2013; Denzin & Lincoln, 2011; Oliver, 2012) symbolic interactionism, with its focus on the nature of meaning making through social interaction, is well placed to inform research aiming to provide insight into human behaviour and processes in healthcare. In aiming to understand NGRN practice readiness, these concepts hold particular relevance. NGRN practice readiness is evident and determined within healthcare contexts characterised by individuals interacting with one another and the environment, collectively influencing the culture and dynamic of the environment. It is within this context that an understanding of the meaning of practice readiness occurs. Using symbolic interactionism to frame this study helps explain how meanings about practice readiness are formulated, identify what interactions between HCPs, NGRNs and the environment reflect NGRN practice readiness and the process involved in formulating decisions about practice readiness.

Intersection in Application: Implications For the Research Process

Constructivism and symbolic interactionism articulate with collective instrumental case study as a fitting framework to underpin this research study. The compatibility of constructivism, symbolic interactionism and collective instrumental case study can be found not only in their similarities but also in their ability to potentiate the application of their concepts.

Similarities between the theoretical perspectives of constructivism and symbolic interactionism complement and inform one another. Constructivism is embodied in the central tenets of symbolic interactionism (Crotty, 1998). Symbolic interactionism adds an additional dimension to constructivism that helps explain how individuals create knowledge from experiences and social settings. Used together they heighten the researcher's ability to gain an in-depth understanding of an issue, particularly the role and interplay of individuals' experiences, their context and the meaning making that results. Both constructivism and symbolic interactionism support the idea of the inseparable, active nature of this relationship where individual perception, cognitive processes and interpretation are central features in the process. Together these philosophical perspectives guide the research process and promote understanding of the circumstances of the situation.

These philosophical and methodological ideas align well with a collective instrumental case study design. Case study provides a means to research a contemporary issue comprehensively and in depth, in its natural context (Creswell, 2014). Case study research recognises that context and interactions between multiple variables and layers shape events in important ways (Luck et al., 2006; Miller et al., 2013, p. 2125). How people construct, interpret and attribute meaning from experiences in their worlds are central tenets of case study research (Creswell, 2014; Merriam, 1998, 2009). Constructivism and symbolic interactionism provide a way of understanding the context in which a phenomenon occurs and the influence of context on the perceptions and meanings that represent the phenomenon.

Adopting a collective instrumental case study design underpinned by constructivism and informed by symbolic interactionism facilitates the notion of a partnership in the inquiry process and values subjectivity, the belief in multiple perspectives on reality and thus exploration of multiple viewpoints. Collectively each element informs the other to analyse how individuals construct meaning and how multiple meanings can be constructed. Further, combining the three results in an explanation of the role of historical, social, cultural and personal experiences in the construction of meaning (Crotty, 1998). Together they also present a framework that aligns well with the researcher's understanding of the world, the belief in multiple perspectives on the truth and the inherent, active transactional role of the individual in the creation of knowledge.

3.3 Research Design: Position of the Researcher

In conducting a qualitative inquiry from this perspective, the researcher acknowledges the idea that multiple realities exist and that realities can be reconstructed through the research process to formulate a new reality and subsequently new ways of knowing (Creswell, 2013, p. 2013; Luck et al., 2006). This places the researcher as the instrument of the research and a partner in the inquiry process co-constructing knowledge with the participants. Interaction between participants and the researcher is essential for generating and collecting data about the experience. The researcher is closely connected and immersed in the research and their subjectivity is valued and openly acknowledged. Constructivism and symbolic interactionism support the idea of the inseparable, active researcher–participant relationship where individual experiences, perception, cognitive processes and interpretation are central features in constructing knowledge. In this position, the researcher needs to remain

cognisant and transparent about their influence throughout the research process and employ methods that support a reflexive stance (Creswell, 2014; Lincoln et al., 2011; Miles et al., 2014). To this end as the researcher, I used a number of techniques to facilitate reflexivity, which are explained in Chapter 4 and 11. These techniques helped to clarify my position in the research, resolve uncertainties and portray a deeper, more nuanced inquiry and outcome.

3.4 Case Study Methodology

In considering case study as the methodology for this research, it was important that I had an in-depth understanding of the methodology to ensure accuracy in the application of the methodology to address the research aim. To this end, I conducted an extensive review of case study research. This review provided clarity and confidence in how I was applying case study in this research. The following two publications explicate the outcome of this review.

Publication 1: *Harrison, H., & Mills, J. (2016). Case study: A good choice for nursing and midwifery research. Pacific Rim International Journal of Nursing Research, 20(3), 179-182.*

During the period of completing the first review on case study research, I was invited by the editor of Pacific Rim International Journal of Nursing Research to submit an editorial for their journal. The journal often sought short viewpoints on different methodologies for nursing and midwifery research and case study was a topic of interest. This publication draws on the ideas of two case study methodologists, Stake (2006) and Yin (2014), that are incorporated in my research to present an overview of a case study and the fundamental steps for a robust flexible application of case study in nursing and midwifery research.

Publication 2: *Harrison, H., Birks, M., Franklin, R., & Mills, J. (2017). Case study research: Foundations and methodological orientations. Forum: Qualitative Social Research, 18(1), 1-17. doi: http://dx.doi.org/10.17169/fqs-18.1.2655*

This publication presents an in-depth exploration of the evolution of case study research from its historical and philosophical origins to contemporary case study approaches. The methodological variations are discussed and the common and key requisites for the successful application of case study are summarised.

Publication 1: ***Case study: A good choice for nursing and midwifery research***

CASE STUDY: A GOOD CHOICE FOR NURSING AND MIDWIFERY RESEARCH

Ms Helena Harrison
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Submitted to: *Pacific Rim International Journal of Nursing Research*

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Declaration by Candidate for Research Article

Chapter 3 publication	**Name** **Signature**	**Nature of contribution**
Harrison, H., & Mills, J. (2016). Case study: A good choice for nursing and midwifery research. *Pacific Rim International Journal of Nursing Research, 20*(3), 179-182.	Helena Harrison	Concept development and key ideas, writing up, review and revisions Preparation for submission
	Jane Mills	Supervision of and concept development and ideas Critical review Approval of final version

Pacific Rim International Journal of Nursing Research

Case Study: A Good Choice for Nursing and Midwifery Research

Case study is a qualitative research approach useful for exploring, explaining and describing complex issues in their real life, natural context.[1,2] As healthcare changes with advances in technology, treatments and demand, nursing practice has become increasingly complex. Contemporary use of case study in nursing and midwifery research has demonstrated its applicability as a unique and powerful approach to explore and understand these complexities.[3,4] For some researchers however, the variation in case study approaches can be confusing. Drawing on the ideas of two leading case study methodologists, Yin[2] and Stake[1,5] we present some of the fundamental steps that can enable a robust yet flexible research design.

What is and why use case study?

Case study research "explores a bounded system (a case) or multiple bounded systems (cases) over time through detailed, in-depth data collection involving multiple sources of information (e.g. observations, interviews, audio visual material, and documents and reports) and reports a case description and case-based themes."[8] The case therefore is the object of the study and commonly referred to as the unit of analysis.

Case study can be used to investigate a range of issues, however the essential requisite for employing case study is the impetus to explore, understand and describe the complexities of a situation or phenomena.[1,2,6,7] Case study research does not ascribe to one ontological, epistemological or methodological position.[6,9,10] This versatility presents the opportunity to design research that best addresses the complexity inherent in research problem.[2,5] Multiple methods can be used to inform the research, enabling a comprehensive, in depth investigation.

Yin[2] explains that determining when to use case study research and defining the type of case study, is primarily based on the purpose of research outlined in the research questions. Research questions are primarily focused on answering queries related to "what is" and "has happened" or explaining the "how and why" of a situation.[2] Data is collected in its natural setting thus context is a significant contributor to the case being studied and minimal control over variables and behavioural events is evident.[1,2] The context in which a nurse works can shape their clinical practice. Case study presents an approach that captures the influence of these elements for a more in-depth, holistic understanding of research problems related to nursing.

Designing the research: Essential steps [Figure 1]

Designing a case study begins with identifying the issues related to the research problem, defining the case and refining the research questions. Issue questions are derived from the literature about the problem being investigated. These help formulate the framework of the case study and are presented as the primary research questions or propositions.[1,2] These direct the data collection and analysis toward the addressing the underlying purpose of the study.[1,2,5]

Determining the type of case study

Varied types of case study exist for different purposes and include descriptive, exploratory, explanatory, illustrative, and evaluative.[2] The case study can also be single or multiple where a number of cases are examined collectively. Judicious choice is based on determining which type best addresses the purpose and research questions of the study.

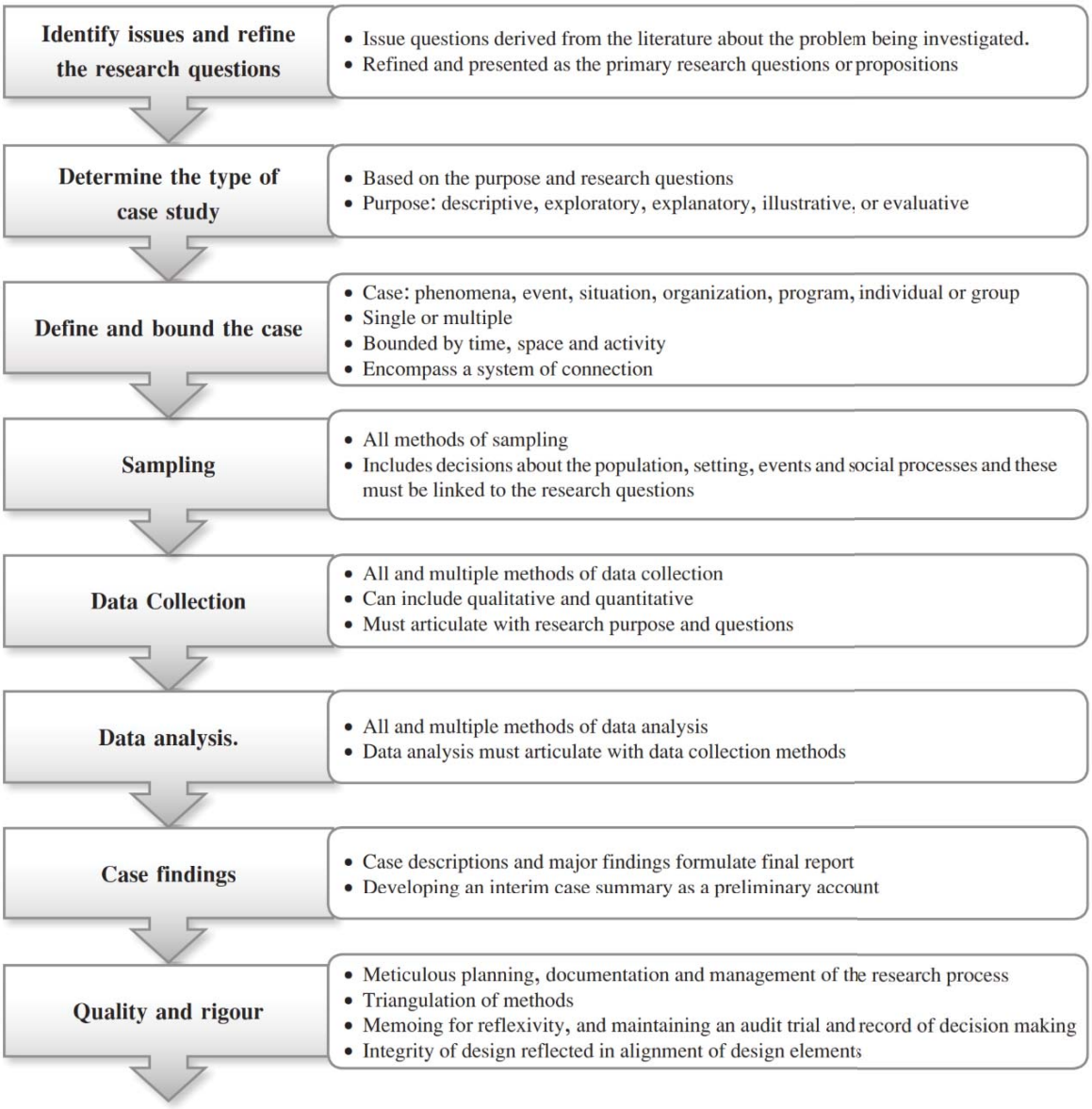

Figure 1: Essential steps in designing case study research

Define and bound the case

The case can be a phenomena, event, situation, organisation, program, individual or group.[1,2,6,7] The case must be bounded by time, space and activity and encompass a system of connection.[1,2] Boundaries vary according to the case and could be geographical, organisational and/or facility specific where a defined phenomenon occurs or a set criterion for an individual or group. Often the boundaries between the case and context can be blurred and take time to specify. Bounding the case applies a frame to focus the research process on the object of the study and manage contextual variables.

Sampling

Sampling in case study includes decisions about the population, setting, events and social processes.[11] Refining these strengthens the boundaries of the case and is critical for data analysis. The sample operationalizes the research design to enable a reliable description and understanding of the case. All types of sampling methods can be applied, however they must be carefully linked to the research questions. An appropriate sampling framework adds external validity where case study conclusions can be more readily understood and applicable to a wider section of the population.[1,2]

Data collection

Conducting site visits (fieldwork) is central to case study research where the researcher's field notes formulate part of the documented evidence for analysis. Conducting these visits relies on identifying a reliable contact person or 'gatekeeper' to facilitate access and data collection at the site.[1,2.5,10] The gatekeeper becomes the fulcrum within the study whereby their site knowledge provides essential guidance about approaches to disseminate study information, recruiting participants and special considerations that might be required.

A useful approach in developing knowledge about the site is to develop an initial overview of the case including location and specific contextual features. This can be refined as the study progresses and inform the final case description drawn from the findings of the study.

Data collection methods are chosen with specificity to address research questions. Multiple qualitative and quantitative methods can be employed to support a holistic, comprehensive investigation and understanding of the case.[1,2,5,7] Methods most commonly utilised in case study research include observation, interviews, focus groups, documentation and artefacts.

Data analysis.

Similarly multiple methods can be used to analyse data, however how data is analysed must articulate with the method chosen for data collection.[1,2] This alignment is important to the integrity of the research design and validity of the research findings. Data analysis methods can include coding and categorizing of data, and thematic and content analysis.[1,2,11]

For multiple case studies, cross case analysis is the final step in the research process. Here each case is analysed and presented separately.[1,2] Findings are compared across cases to explore how different contexts and processes vary. Similarities, differences and unique findings are identified and the final product of the research is presented as a collective case description.

Methods of triangulation are valued and commonly used at different stages during data analysis to add depth and rigor to the findings.[2] Triangulation of data sources, researchers, methods (within and between) and/or theory can be combined, compared and contrasted within and across cases.[1,11]

Quality and rigour

Memoing as a reflexive activity is valuable in case study research and constant and central to the research process. The aim of memos is to provide a record of decisions and an audit trail of the research process.[12] Memoing captures the researcher's thinking and focuses on writing up ideas separate to the data collection and analysis.

Meticulous planning, documentation and management of the case study are important to ensure rigor and quality.[2,10] Ensuring the overall approach articulates with the study's purpose is critical. A strong articulation contributes to the credibility and integrity of the final case study.[2,4,9]

Case findings

Findings from the data collection and analysis are presented as case descriptions and key themes. Case descriptions can vary depending on the type of case study and approach used. These can be descriptive, illustrative or explanatory in nature.[1,2] Initially, developing an interim case summary that outlines a preliminary account of what is happening in the case can enable refinement of the final case description.[11] The case description and major findings are combined to formulate the final report.

Conclusion

Case study research is a unique research approach capable of providing valuable insights into complex nursing phenomena. Understanding the essential steps in case study research can empower nursing and midwifery researchers to make significant contributions to nursing knowledge, clinical practice and health care. What is presented here is a brief and simplistic introduction to case study research approaches. Case study designs can be complex and need to be carefully considered and planned. Designing a robust case study takes time however the outcome is well worth the time and effort invested.

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Publication 2: ***Case study research: Foundations and methodological orientations***

CASE STUDY RESEARCH: FOUNDATIONS AND METHODOLOGICAL ORIENTATIONS

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	Melanie Birks	Concept development and ideas Critical review Approval of final version
	Richard Franklin	Concept ideas Critical review Approval of final version
	Jane Mills	Supervision of and concept development and ideas Critical review Approval of final version

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Case Study Research: Foundations and Methodological Orientations

Helena Harrison, Melanie Birks, Richard Franklin & Jane Mills

Key words: case study; method; methodology; nursing research; qualitative; research design; research

Abstract: Over the last forty years, case study research has undergone substantial methodological development. This evolution has resulted in a pragmatic, flexible research approach, capable of providing comprehensive in-depth understanding of a diverse range of issues across a number of disciplines. Change and progress have stemmed from parallel influences of historical transformations in approaches to research and individual researcher's preferences, perspectives, and interpretations of this design. Researchers who have contributed to the development of case study research come from diverse disciplines with different philosophical perspectives, resulting in a variety of definitions and approaches. For the researcher new to using case study, such variety can create a confusing platform for its application. In this article, we explore the evolution of case study research, discuss methodological variations, and summarize key elements with the aim of providing guidance on the available options for researchers wanting to use case study in their work.

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1. Introduction

Case study research has grown in reputation as an effective methodology to investigate and understand complex issues in real world settings. Case study designs have been used across a number of disciplines, particularly the social sciences, education, business, law, and health, to address a wide range of research questions. Consequently, over the last 40 years, through the application of a variety of methodological approaches, case study research has undergone substantial development. Change and progress have stemmed from parallel influences from historical approaches to research and individual researcher's preferences, perspectives on, and interpretations of case study research. Central

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to these variations is the underpinning ontological and epistemological orientations of those involved in the evolution of case study research. Researchers who have contributed to the development of case study research come from diverse disciplines and their philosophical underpinnings have created variety and diversity in approaches used. Consequently, various designs have been proposed for preparing, planning, and conducting case study research with advice on key considerations for achieving success. As a result, while case study research has evolved to be a pragmatic, flexible research approach, the variation in definition, application, validity, and purposefulness can create a confusing platform for its use. [1]

In this article, we examine each of these issues in turn, with the aim of improving our understanding of case study research and clarifying the requisite tenets to consider when designing a case study. We begin with an overview of the history and evolution of case study research, followed by a discussion of the methodological and philosophical variations found within case study designs. We end with a summary of the common characteristics of case study research and a table that brings together the fundamental elements that we found common in all case study approaches to research. [2]

2. History and Evolution

Case study research as a strategy for methodological exploration, according to FLYVBJERG (2011) "has been around as long as recorded history" (p.302). Contemporary case study research is said to have its origins in qualitative approaches to research in the disciplines of anthropology, history, psychology, and sociology (MERRIAM, 1998; SIMONS, 2009; STEWART, 2014). Historical examples of case study stem as far back as the early nineteenth century with the biography of Charles DARWIN (STEWART, 2014). Most attribute the origins of case study research to studies undertaken in anthropology and social sciences in the early twentieth century when lengthy, detailed ethnographic studies of individuals and cultures were conducted using this design (JOHANSSON, 2003, MERRIAM, 2009; SIMONS, 2009; STEWART, 2014). Sociologists and anthropologists investigated people's lives, experiences, and how they understood the social and cultural context of their world, with the aim of gaining insight into how individuals interpreted and attributed meaning to their experiences and constructed their worlds (JOHANSSON, 2003; SIMONS, 2009). Such investigations were conducted in the natural setting of those experiences with results presented descriptively or as a narrative (MERRIAM, 2009). The most notable case studies include THOMAS and ZNANIECKI's (1958 [1918-1920]) study of Polish peasants in Europe and America and, the ethnographic work by MALINOWSKI (1913) in the Trobriand Islands in Melanesia that spanned over several years (CRESWELL, HANSON, PLANO CLARK & MORALES, 2007; JOHANSSON, 2003; STEWART, 2014). [3]

With the emergence and dominance of positivism in science in the late 1940s and 1950s, quantitative methods became a popular focus for the social sciences. As a result, surveys, experiments, and statistical methods anchored in

quantitative approaches were favored and considered more rigorous than qualitative designs (JOHANSSON, 2003). The dominance of research using experimental designs continued through the 1960s and 1970s with quantitative empirical results considered to be gold standard evidence. Case studies continued to be used during this time, however usually as a method within quantitative studies or referred to as descriptive research to study a specific phenomenon (MERRIAM, 2009). At the same time, case study research was often criticized for its inability to support generalizability and thus considered to provide limited validity and value as a research design (JOHANSSON, 2003; MERRIAM, 2009; STEWART, 2014). This context led to a philosophical division in research approaches: those supporting positivism and quantitative approaches and those aligned with qualitative methods embedded in constructivist and interpretivist paradigms. [4]

Antecedents of modern day case study research are most often cited as being conducted in the Chicago School of Sociology between the 1920-1950s (STEWART, 2014). Here, anthropologists practiced their methods on university cultures or by conducting lengthy case studies involving field-based observations of groups with the aim of understanding their social and cultural lives (CRESWELL et al., 2007; JOHANSSON, 2003; STEWART, 2014). Parallel to the use of case studies in anthropology, medicine and disciplines in the social sciences such as sociology, education and political science also embraced case study as a form of inquiry (ANTHONY & JACK, 2009; BROWN, 2008; CRESWELL et al., 2007; GEORGE & BENNETT, 2005; GERRING, 2004; SIMONS, 2009; YIN, 2014). [5]

A second generation of case study researchers emerged with the advent of grounded theory methodology (GLASER & STRAUSS, 1967). Grounded theory "merged qualitative field study methods from the Chicago School of Sociology with quantitative methods of data analysis" (JOHANSSON, 2003, p.8), resulting in an inductive methodology that used detailed systematic procedures to analyze data. This renewed interest in qualitative methodology led to a revival in the use of case study in a number of disciplines (ANTHONY & JACK, 2009; GEORGE & BENNETT, 2005; JOHANSSON, 2003; MERRIAM, 2009; STAKE, 1995). According to JOHANSSON (2003), Robert YIN followed this progress, and drawing on scientific approaches to research gained from his background in the social sciences, applied experimental logic to naturalistic inquiry, and blended this with qualitative methods, further bridging the methodological gap and strengthening the methodological quality of case study research. He presented a structured process for undertaking case study research where formal propositions or theories guide the research process and are tested as part of the outcome, highlighting his realist approach to qualitative case study research. While still qualitative and inductive, it was deterministic in nature with an emphasis on cause and effect, testing theories, and an apprehension of the truth (BROWN, 2008; YIN, 2014). [6]

Similarly, the uptake of case study research in the political sciences, particularly during the 1980's and 1990's, led to a more integrated methodological approach

with the aim of theoretical development and testing (GEORGE & BENNETT, 2005). The integration of formal, statistical, and narrative methods in a single study, combined with the use of empirical methods for case selection and causal inference, demonstrated the versatility of case study design and made a significant contribution to its methodological evolution (ibid.). Similarly, case studies in international relations integrated rigorous, standardized methods with statistical and formal methods, including qualitative comparative analysis and process tracing to improve understanding of world politics (BENNETT & ELMAN, 2007; GERRING, 2004; LEVY, 2007). According to GEORGE and BENNETT (2005) "scholars have formalized case study methods more completely and linked them to underlying arguments in the philosophy of science" (p.6). The continued use of case study to understand the complexities of institutions, practices, processes, and relations in politics, has demonstrated the utility of case study for researching complex issues, and testing causal mechanisms that can be applied across varied disciplines. [7]

Corresponding with these developments, in the 1970's, educational research embraced case study as a way to evaluate curriculum design and innovation (MERRIAM, 2009; SIMONS, 2009; STAKE, 1995). Methods were required that could be used to explore factors such as participants' perspectives and the influence of socio-political contexts on curriculum successes and failures (SIMONS, 2009). Development of case study research in education, focused on the need to determine the impact of educational programs and provide relevant evidence for policy and practice decisions that supported social and educational change in the United Kingdom and the United States (ibid.). The most significant contributors to this field were STAKE (1995, 2006) and MERRIAM (1998, 2009). STAKE (1995), an educational psychologist with an interest in developing program evaluation methods, used a constructivist orientation to case study. This resulted in placing more emphasis on inductive exploration, discovery, and holistic analysis that was presented in thick descriptions of the case. Similarly, MERRIAM (1998, 2009) used case study research to explore and evaluate educational programs. MERRIAM's approach emphasized defining and understanding the case through the products of inquiry and drew on the work of both YIN and STAKE. MERRIAM (2009) described case study research by its characteristics: particularistic, descriptive and heuristic, highlighting the purpose and qualitative nature of case study research, the focus on a specific entity and, the motivation to understand and describe the findings. Similar to STAKE (1995, 2006), MERRIAM (1998, 2009) was not as structured in her approach as YIN (2014), but promoted the use of a theoretical framework or research questions to guide the case study and organized, systematic data collection to manage the process of inquiry. [8]

Simple in theory yet complex in nature, the planning, preparation and execution of case study research has developed to a point where the continued application of case study research across a number of professions particularly education, health, and social sciences, has provided a unique platform for credible research endeavors. Case study research has grown in sophistication and is viewed as a valid form of inquiry to explore a broad scope of complex issues, particularly

when human behavior and social interactions are central to understanding topics of interest (ANTHONY & JACK, 2009; FLYVBJERG, 2011; GEORGE & BENNETT, 2005; LUCK, JACKSON & USHER, 2006; MERRIAM, 2009; STAKE, 2006; YIN, 2014). [9]

In Figure 1, developed by JOHANSSON (2003) and adapted for this discussion, a summary of the evolution of case study across a timeline dating back to 1600 is displayed. Key contributors to case study research and major contextual influences on its evolution are included. As the figure highlights, early case studies were conducted in the social sciences. With the dominance of logical positivism from the 1940's through to the 1960's and 1970's case study methodology was viewed with skepticism and criticism. The development of grounded theory in the 1960's led to a resurgence in case study research, with its application in the social sciences, education, and the humanities. Over the last 50 years, case study has been re-established as a credible, valid research design that facilitates the exploration of complex issues.

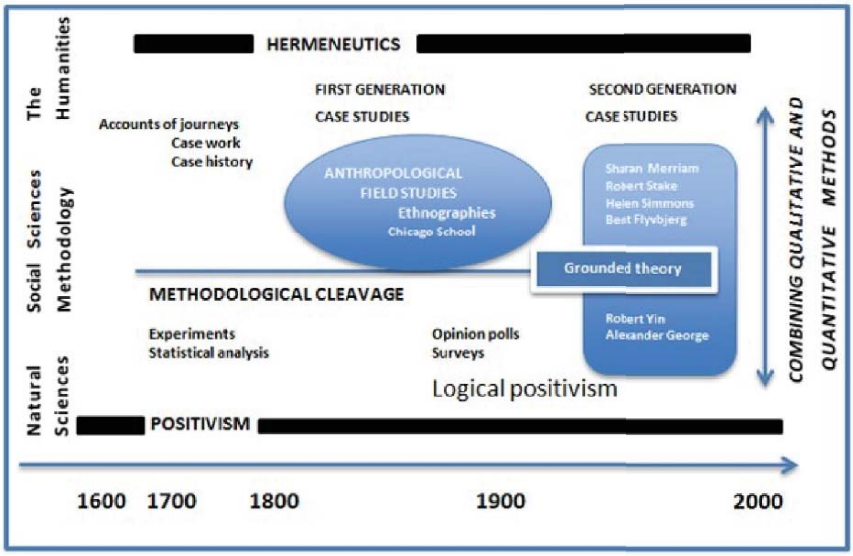

Figure 1: The history and evolution of case study research (JOHANSSON, 2003, p.7) [10]

3. Foundational Concepts

While over time the contributions of researchers from varied disciplines have helped to develop and strengthen case study research, the variety of disciplinary backgrounds has also added complexity, particularly around how case study research is defined, described, and applied in practice. In the sections that follow, the nature of this complexity in explored. [11]

3.1 Definitions and descriptions

There are a number of definitions and descriptions presented across the literature, which can create confusion when attempting to understand case study research. The most common definitions come from the work of YIN (2014), STAKE (1995), and MERRIAM (2009). YIN's two-part definition (2014) focuses on the scope, process, and methodological characteristics of case study research, emphasizing the nature of inquiry as being empirical, and the importance of context to the case. On the other hand, STAKE (1995) takes a more flexible stance and while concerned with rigor in the processes, maintains a focus on what is studied (the case) rather than how it is studied (the method). For STAKE case study research is "the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances" (p.xi). MERRIAM (2009) includes what is studied and the products of the research when defining case study as: "... an in depth description and analysis of a bounded system" (p.40). Like STAKE, MERRIAM emphasizes the defining feature of case study research as being the object of the study (the bounded system; i.e., the case) adding that case study research focuses on a particular thing and that the product of an investigation should be descriptive and heuristic in nature. In discussing the proliferation of definitions (and subsequent confusion), FLYVBJERG (2011) contends that using a simple definition might be a more useful approach, citing the MERRIAM-WEBSTER DICTIONARY's (2009) definition, as an example that captures the key requisites in the context of research: "an intensive analysis of an individual unit (as a person or community) stressing developmental factors in relation to environment" (p.103). These varied definitions stem from the researchers' differing approaches to developing case study methodology and often reflect the elements they emphasize as central to their designs. The diversity of approaches subsequently adds diversity to definition and description. [12]

3.2 Methodology or method

A further challenge to understanding case study research relates to it being referred to and used as both a methodology and a method. MILLS (2014) distinguishes methods as procedures and techniques employed in the study, while methodology is the lens through which the researcher views and makes decisions about the study. Given the variation in definitions and descriptions, referring to case study research as a methodology and/or a single method can be perplexing, misleading, and at times counterproductive (ANTHONY & JACK, 2009; BOBLIN, IRELAND, KIRKPATRICK & ROBERTSON, 2013; FLYVBJERG,

2011). Furthermore, advocates of case study encourage the use of both quantitative and qualitative methods within their designs adding further obscurity to the question of methodology (MERRIAM, 1998; STAKE, 1995; STEWART, 2014; YIN, 2014). [13]

The ambiguity about case study being either or both a methodology and method, is compounded by the terminology used in discussions about case study. Across the literature, case study is referred to as a methodology and a method, an approach, research and research design, research strategy, and/or a form of inquiry (ANTHONY & JACK, 2009; BROWN, 2008; CRESWELL, 2014; GERRING, 2004; MERRIAM, 2009; SIMONS, 2009, STAKE, 1995, 2006; STEWART, 2014; YIN, 2014). Often these terms are used interchangeably without definitional clarity. For example, YIN (2014) discusses case study research and in the context of presenting case study, refers to it as a research method while emphasizing the procedures used. He does not use the terms methodology or strategy. CRESWELL (2014) refers to case studies as a qualitative design, while others use the term case study (FLYVBJERG, 2011; STAKE, 1995, 2006; STEWART, 2014), qualitative case study (MERRIAM, 2009), or describe case study as an approach (SIMONS, 2009). This mixed use of terminology is confusing given the definitional separations between methodology and methods and the varied application of case study in research endeavors. [14]

Prominent case study researchers do however emphasize that an overarching methodology shapes a case study design and that multiple sources of data and methods can be used (MERRIAM, 2009; STAKE, 2006; YIN, 2014), thus providing the distinction between the two. This distinction accentuates the need for researchers to describe the particular underpinning methodology adopted and to clarify the alignment of chosen methods used with their philosophical assumptions and their chosen approach. Exploring the philosophical orientation of case study research and variations in different case study approaches can help to clarify these differences, and promote a better understanding of how to apply these principles in practice. [15]

3.3 Philosophical orientation

Many methodologies are aligned with specific philosophical positions that guide the research process. Case study, however, has a practical versatility in its agnostic approach whereby "it is not assigned to a fixed ontological, epistemological or methodological position" (ROSENBERG & YATES, 2007, p.447). Philosophically, case study research can be orientated from a realist or positivist perspective where the researcher holds the view that there is one single reality, which is independent of the individual and can be apprehended, studied and measured, through to a relativist or interpretivist perspective. A relativist or interpretivist perspective adopts the premises that multiple realities and meanings exist, which depend on and are co-created by the researcher (LINCOLN, LYNHAM & GUBA, 2011; YIN, 2014). This philosophical versatility provides the researcher with the opportunity to decide the methodological orientation used in

the conduct of the case study (STEWART, 2014; YIN, 2014). Examples of this choice are discussed later where the philosophical variations of MERRIAM (2009), STAKE (1995), and YIN (2014) are explicated. [16]

In the context of healthcare research and specifically nursing, LUCK et al. (2006) describe case study research as "a bridge across paradigms" (p.103). As a result, some case study approaches are either quantitatively or qualitatively orientated while others encompass both qualitative and quantitative aims and methods (MERRIAM, 2009; MILES, HUBERMAN & SALDANA, 2014; YIN, 2014). DENZIN and LINCOLN (2011) emphasize the qualitative essence of case study, while acknowledging its evolution and fluidity with regard to accommodating varied ontologies, epistemologies, methodologies, and methods. This ability to accommodate a range of philosophical positions is seen as an advantage whereby case study enables the opportunity to design research that can be specifically tailored to the inherent complexity of the research problem (ANTHONY & JACK, 2009; CASEY & HOUGHTON, 2010; FLYVBJERG, 2011; FARQUHAR, 2012; LUCK et al., 2006; MERRIAM, 2009; STAKE, 2006; YIN, 2014). [17]

Case study research is most often described as qualitative inquiry (CRESWELL, 2014; DENZIN & LINCOLN, 2011; MERRIAM, 2009; MILES et al., 2014; STAKE, 2006). Qualitative paradigms are broad and can encompass exploratory, explanatory, interpretive, or descriptive aims. Examples include narrative research, phenomenology, grounded theory, and ethnography (DENZIN & LINCOLN, 2011). Each methodology is unique in approach depending on the ontological and epistemological stance, however all stem from the motivation to explore, seek understanding, and establish the meaning of experiences from the perspective of those involved (ibid.; see also MERRIAM, 2009). For this purpose, qualitative researchers can employ a broad scope of methods and interpretative practices in any one study, although they typically include observations, interviews, and analysis of participants' words (DENZIN & LINCOLN, 2011; MERRIAM, 2009). DENZIN and LINCOLN (2011, pp. 8-10) summarize the characteristics of qualitative research into five key attributes:

1. reducing the use of positivist or post positivist perspectives;
2. accepting postmodern sensibilities;
3. capturing the individual's point of view;
4. examining the constraints of everyday life;
5. securing rich descriptions. [18]

These attributes are commonly exemplified in case study research. The fundamental goal of case study research is to conduct an in-depth analysis of an issue, within its context with a view to understand the issue from the perspective of participants (MERRIAM, 2009; SIMONS, 2009; STAKE, 2006, YIN, 2014). Like other forms of qualitative research, the researcher will seek to explore, understand and present the participants' perspectives and get close to them in their natural setting (CRESWELL, 2013). Interaction between participants and the

researcher is required to generate data, which is an indication of the researcher's level of connection to and being immersed in the field. Because of this, constructivism and interpretivism commonly permeate the implementation of this research design. Methods used in case study to facilitate achieving the aim of co-constructing data most often include observations, interviews, focus groups, document and artifact analysis (MERRIAM, 2009; SIMONS, 2009; STAKE, 1995; 2006; STEWART, 2014; YIN, 2014). The researcher's perceptions and interpretations become part of the research and as a result, a subjective and interpretive orientation flows throughout the inquiry (CRESWELL, 2014). Subjectivity is openly acknowledged and to manage this, the researcher embraces a reflexive stance within the study, adopting methods such as memoing and journaling that support this position (DENZIN & LINCOLN, 2011; MILES et al., 2014, STAKE, 2006; YIN, 2014). [19]

3.4 Philosophical variation

In choosing a methodological position, careful consideration of the different case study approaches is required to determine the design that best addresses the aim of the study, and that aligns with the researcher's worldview. The goal of this alignment is to engender coherence between the researcher's philosophical position, their research question, design, and methods to be used in the study (FARQUHAR, 2012; LUCK et al., 2006; STEWART, 2014; YIN, 2014). To assist in understanding and achieving this alignment, the qualitative case study approaches developed by YIN (2014), STAKE (1995) and MERRIAM (1998, 2009) are explored in the following sections. Examples are provided of how these researchers' philosophical orientation influences the application of case study in practice. [20]

3.4.1 YIN: Realist—postpositivist

YIN (2014) conceptualizes case study research as a form of social science. Post-positivism is evident in how he defines "case study as a form of empirical inquiry" (p.16). YIN himself describes his approach to case study as using a "realist perspective" (p.17) and focuses on maintaining objectivity in the methodological processes within the design. [21]

Postpositivist qualitative researchers conduct research that embraces the ideals of objectivity and the generalizability of results (ELLINGSON, 2011). The goal of a postpositivist researcher is to use science as a way to apprehend the nature of reality while understanding that all measurement is imperfect. Therefore, emphasis is placed on using multiple methods with triangulation to circumvent errors and understand what is happening in reality as close as possible to the "truth" (LINCOLN et al., 2011). The researcher will often categorize qualitative data to create quantitative data that can then be analyzed using statistical methods. Validity of research results are verified through the scrutiny of others and, as such, adherence to mechanisms that ensure rigor in data collection and analysis is vital. Furthermore, postpositivists accept that everyone is inherently biased in worldviews, which ultimately influence how the methods used are

deployed. Interaction with research subjects therefore needs to be minimized and subjectivity managed to avoid biasing the results (ibid.). [22]

Embedded within YIN's (2014) case study design are the hallmarks of a postpositivist approach to research: seeking rival explanations and falsifying hypotheses, the capability for replication with a multiple case study design, the pursuit of generalizations (if required), minimizing levels of subjectivity, and the use of multiple methods of qualitative and quantitative data collection and analysis. While objectivity is a goal, YIN also recognizes the descriptive and interpretive elements of case study. According to YIN what makes case study research distinct from experimental studies is the case study is investigated in context, examined in its "real world setting" (p.16). Selection of cases is based on the purpose of the research and related to the theoretical propositions about the topic of interest. YIN suggests careful screening in the selection of cases to ensure specific relevance to the issues of interest and the use of replication logic: cases are chosen to produce anticipated contrasting findings (theoretical replication) or similar findings (literal replication). Precision, process, and practicality are core attributes of YIN's approach to case study. Design features are sequentially structured and motivated by empirical application. This positioning reflects the axiology of postpositivism where maintaining intellectual honesty, managing bias, and acknowledging limitations, coupled with meticulous data collection and accurate reporting are critical elements in the conduct of research (KILLAM, 2013; YIN, 2014). [23]

3.4.2 MERRIAM: Pragmatic constructivist

MERRIAM (1998) maintains a constructivist approach to case study research, whereby the researcher assumes that reality is constructed intersubjectively through meanings and understandings developed socially and experientially. Like YIN (2014), MERRIAM (1998, 2009) asserts that when information is plentiful and concepts abstract, it is important to utilize processes that help interpret, sort, and manage information and that adapt findings to convey clarity and applicability to the results. In this way, MERRIAM's perspective brings forth a pragmatic approach to constructivist inquiry. MERRIAM (2009) acknowledges case study research can use both quantitative and qualitative methods; however, when working on qualitative case studies, methods aimed at generating inductive reasoning and interpretation rather than testing hypothesis take priority. Cases are selected based on the research purpose and question, and for what they could reveal about the phenomenon or topic of interest. The aim is to provide a rich holistic description that illuminates one's understanding of the phenomena (MERRIAM, 1998). Interviews are the most common form of qualitative data collection, although MERRIAM does not stipulate prioritizing a particular method for data collection or analysis, she does emphasize the importance of rigorous procedures to frame the research process. Advocating for careful planning, development, and execution of case study research, MERRIAM (1998, 2009) discusses the pragmatic structures that ensure case study research is manageable, rigorous, credible, and applicable. Processes such as descriptive, thematic and content analysis, and triangulation are significant in ensuring the

quality of a study, therefore, methods of data collection and analysis need to be organized and systematized with a detailed chain of evidence (MERRIAM, 2009). Theoretical frameworks or research questions are used and drawn from the literature or discipline (MERRIAM, 1998). According to BROWN (2008), Merriam's style brings forth a practical application of pluralistic strategies that guide pragmatic constructivist research to derive knowledge about an area of inquiry. [24]

3.4.3 STAKE: Relativist—constructivist/interpretivist

STAKE (1995, 2006) has an approach to case study research that is qualitative and closely aligned with a constructivist and interpretivist orientation. While having a disciplined approach to the process and acknowledging that case study can use quantitative methods, STAKE's approach is underpinned by a strong motivation for discovering meaning and understanding of experiences in context. The role of the researcher in producing this knowledge is critical, and STAKE emphasizes the researcher's interpretive role as essential in the process. An interpretative position views reality as multiple and subjective, based on meanings and understanding. Knowledge generated from the research process is relative to the time and context of the study and the researcher is interactive and participates in the study. In terms of epistemology, STAKE argues that situation shapes activity, experience, and one's interpretation of the case. For STAKE (2006), to understand the case "requires experiencing the activity of the case as it occurs in its context and in its particular situation" (p.2). The researcher attempts to capture her or his interpreted reality of the case, while studying the case situationally enables an examination of the integrated system in which the case unfolds. Similar to YIN (2014) and MERRIAM (2009), a case or cases are selected for what they can reveal about topic of interest and depend on the aim and conditions of the study. A case is selected because it is interesting in itself or can facilitate the understanding of something else; it is instrumental in providing insight on an issue (STAKE, 2006). [25]

For STAKE, multiple sources and methods of data collection and analysis can be used, however, interviews and observations are the preferred and dominant data collection method. In seeking understanding and meaning, the researcher is positioned with participants as a partner in the discovery and generation of knowledge, where both direct interpretations, and categorical or thematic grouping of findings are used. STAKE (1995) recommends vignettes—episodes of storytelling—to illustrate aspects of the case and thick descriptions to convey findings, a further illustration of his constructivist and interpretivist approach to case study research. [26]

BROWN (2007) suggests the three approaches used by these seminal researchers rest along a quantitative-qualitative continuum where the postpositivist methodology of YIN (2014) sits at one end, STAKE's interpretivist design (1995, 2006) sits at the other end and MERRIAM (1998, 2009) who as a pragmatic constructivist draws on the elements of both, rests toward the center. BROWN (2008) sums up the influences of each, saying that "case study research

is supported by the pragmatic approach of Merriam, informed by the rigour of Yin and enriched by the creative interpretation described by Stake" (p.9). While some may argue that mixing qualitative and quantitative methods could threaten the veracity of the research (BOBLIN et al., 2013; SANDELOWSKI, 2011), MERRIAM's approach demonstrates that when the integrity of the design is robust, methodological flexibility can be accommodated. [27]

4. Common Characteristics of Case Study Research

Despite variation in the approaches of the different exponents of case study, there are characteristics common to all of them. Case study research is consistently described as a versatile form of qualitative inquiry most suitable for a comprehensive, holistic, and in-depth investigation of a complex issue (phenomena, event, situation, organization, program individual or group) in context, where the boundary between the context and issue is unclear and contains many variables (CRESWELL, 2014; FLYVBJERG, 2011; MERRIAM, 2009; SIMONS, 2009; STAKE, 2006; YIN, 2014). Case study research can be used to study a range of topics and purposes (SIMONS, 2009; STAKE, 2006; STEWART, 2014) however, the essential requisite for employing case study stems from one's motivation to illuminate understanding of complex phenomena (MERRIAM, 2009; STAKE, 2006; YIN, 2014). Primarily exploratory and explanatory in nature, case study is used to gain an understanding of the issue in *real life settings* and recommended to answer *how and why* or less frequently *what* research questions (FLYVBJERG, 2011; MERRIAM, 2009; SIMONS, 2009; STAKE, 2006; STEWART, 2014; YIN 2014). [28]

Defining the case (unit of analysis or object of the study) and bounding the case can be difficult as many points of interest and variables intersect and overlap in case study research. Developing research questions and/or propositions to select the case, identify the focus, and refine the boundaries is recommended to effectively establish these elements in the research design (MERRIAM, 2009; STAKE, 2006; YIN, 2014). Bounding the case is essential to focusing, framing, and managing data collection and analysis. This involves being selective and specific in identifying the parameters of the case including the participant/s, location and/or process to be explored, and establishing the timeframe for investigating the case (MERRIAM, 2009; STAKE, 2006; YIN, 2014). [29]

The use of multiple methods to collect and analyze data are encouraged and found to be mutually informative in case study research where together they provide a more synergistic and comprehensive view of the issue being studied (FLYVBJERG, 2011; MERRIAM, 2009; STAKE, 2006; YIN, 2014). How the methods are used will vary and depend on the research purpose and design, which is often a variation of a single or multiple case study research design. Interviews and focus groups, observations, and exploring artifacts are most commonly employed to collect and generate data with triangulation of methods and data, however, this is not exclusive. [30]

The fundamental elements of case study research (Table 1) are evident in the approaches of MERRIAM (2009), STAKE (1995, 2006), and YIN (2014) as well as other case study researchers who have contributed to the development and discussion of case study research (CRESWELL, 2013, 2014; FLYVBJERG, 2011; GEORGE & BENNETT, 2007; MILES et al., 2014; SIMONS, 2009). These elements delineate case study from other forms of research and inform the critical aspects of the research design and execution.

Element	Description
The case	Object of the case study identified as the entity of interest or unit of analysis Program, individual, group, social situation, organization, event, phenomena, or process
A bounded system	Bounded by time, space, and activity Encompasses a system of connections Bounding applies frames to manage contextual variables Boundaries between the case and context can be blurred
Studied in context	Studied in its real life setting or natural environment Context is significant to understanding the case Contextual variables include political, economic, social, cultural, historical, and/or organizational factors
In-depth study	Chosen for intensive analysis of an issue Fieldwork is intrinsic to the process of the inquiry Subjectivity a consistent thread—varies in depth and engagement depending on the philosophical orientation of the research, purpose, and methods Reflexive techniques pivotal to credibility and research process
Selecting the case	Based on the purpose and conditions of the study Involves decisions about people, settings, events, phenomena, social processes Scope: single, within case and multiple case sampling Broad: capture ordinary, unique, varied and/or accessible aspects Methods: specified criteria, methodical and purposive; replication logic: theoretical or literal replication (YIN, 2014)
Multiple sources of evidence	Multiple sources of evidence for comprehensive depth and breadth of inquiry Methods of data collection: interviews, observations, focus groups, artifact and document review, questionnaires and/or surveys Methods of analysis: vary and depend on data collection methods and cases; need to be systematic and rigorous Triangulation highly valued and commonly employed

Element	Description
Case study design	Descriptive, exploratory, explanatory, illustrative, evaluative
	Single or multiple cases
	Embedded or holistic (YIN, 2014)
	Particularistic, heuristic, descriptive (MERRIAM, 1998, 2009)
	Intrinsic, instrumental, and collective (STAKE, 1995, 2006)

Table 1: Case study elements and descriptors [31]

A final, critical point when conducting case study research is the importance of careful preparation and planning, coupled with the development of a systematic implementation structure (FLYVBJERG, 2011; MERRIAM, 2009; STAKE, 2006; STEWART, 2014; YIN, 2014). As discussed earlier, ensuring the alignment of philosophy and methodology with the research purpose and methods employed underpins a rigorous research process (STEWART, 2014). Clarity in this alignment is fundamental to ensuring the veracity of the research and depends on the design developed. During this process, researchers are encouraged to "logically justify their philosophical position, research design and include a coherent argument for inclusion of varying research methods" (LUCK et al., 2006, p.107). Study propositions, theory, research or issue questions work as a conceptual framework and need to align with the case to guide the design and determine methods of data collection and analysis (STAKE, 2006; STEWART, 2014; YIN, 2014). Maintaining meticulous records and a systematic chain of evidence over the duration of the study is critical; as is being able to access, present and explain procedures supports the ethical integrity and rigor of the research and findings (MERRIAM, 2009; STEWART, 2014; YIN, 2014). Collective alignment of these elements articulates a justifiable framework for the research study and cultivates trustworthiness and the validity, reliability and credibility of the research findings. [32]

Considering these fundamental elements and common approaches to case study research, the definition from CRESWELL et al. (2007) seems to best capture the full depth and breadth of case study concepts and descriptions. The authors describe case study as "a methodology, a type of design in qualitative research, an object of study and a product of the inquiry" (p.245). They conclude with a definition that collates the hallmarks of key approaches and represents the core features of a case study:

> "Case study research is a qualitative approach in which the investigator explores a bounded system (a case) or multiple bounded systems (cases) over time through detailed, in-depth data collection involving multiple sources of information (e.g., observations, interviews, audiovisual material, and documents and reports) and reports a case description and case-based themes" (ibid.). [33]

5. Conclusion

Since the 1980's a broad scope of case study approaches have developed. This range accentuates the flexibility of case study research as a distinct form of inquiry that enables comprehensive and in-depth insight into a diverse range of issues across a number of disciplines. While differences exist in some areas, commonalities are evident that can guide the application of a case study research design. Key contributors to the development of case study agree that the focus of a case study is the detailed inquiry of a unit of analysis as a bounded system (the case), over time, within its context. The versatility of case study research to accommodate the researcher's philosophical position presents a unique platform for a range of studies that can generate greater insights into areas of inquiry. With the capacity to tailor approaches, case study designs can address a wide range of questions that ask why, what, and how of an issue and assist researchers to explore, explain, describe, evaluate, and theorize about complex issues in context. Outcomes can lead to an in-depth understanding of behaviors, processes, practices, and relationships in context. Professions including the social sciences, education, health, law, management, business, and urban planning have embraced case study research, demonstrating these outcomes. Ongoing application of and sound debate about the value, validity, and capability of case study research have strengthened the efficacy of case study approaches as powerful forms of qualitative research. [34]

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3.5 Chapter Summary

In this chapter, the choice of a collective instrumental case study design underpinned with constructivism and symbolic interactionism was explained and justified. Coupled with a detailed exploration of the history and evolution of case study, the researcher's knowledge and understanding of case study was demonstrated and the suitability of the research design to addresses the research aim and questions established. The successful alignment and fittingness of a research design facilitates the credibility in the results of the research. The next chapter explains the methods employed to achieve the aim of the study and address research questions.

Chapter 4: Methods

4.1 Introduction

In the previous chapter, collective instrumental case study was discussed as the research design for this study. The purpose of this chapter is to explain and justify the methods employed in this research. The chapter begins with a summary of the methods, which is followed by a detailed description of their application in this research. Ethical issues considered in the conduct of this research are discussed and factors contributing to the quality and rigour of the research that establish the credibility of the findings conclude the chapter.

4.2 Research Methods

Methods are the procedures and techniques employed in a study to collect, generate and analyse data (Birks & Mills, 2015). According to Carter and Little (2007), the methods are the praxis through which elements of the research design become visible. Methods in case study include those used for case selection and recruitment, data generation, collection and analysis, data management and reporting the findings (Miles et al., 2014; Stake, 2006; Stewart, 2014; Yin, 2014). For credible conclusions, methods must address ethical considerations, and align with the research aim and design.

The aim of this collective instrumental case study was to generate an understanding of NGRN practice readiness from the perspective of HCPs in Australia. In addressing this aim, the emphasis was on eliciting diverse perspectives from individuals who experience NGRN practice readiness within their context of practice. Associated with this is an assumption that each individual's perceptions are different and influenced by social, cultural, situational and contextual interaction (Hyslop-Margison & Strobel, 2008; Stake, 2006). Employing multiple methods is recommended to effectively capture diverse perspectives for an integrated, representative understanding of a case. Accessing multiple sites extends the variation for greater diversity and depth in outcomes (Creswell, 2013; Stake, 2006; Yin, 2014). Narrowing the scope for data collection, focusing the investigation to address the research aim and questions, and choosing accessible cases creates a manageable boundary, research process and context for investigation (Miles et al., 2014). Table 5 provides an overview of the multiple methods employed in this study.

Table 5: Overview of research methods in this study

Research design	**Collective instrumental case study**
Ethics approval	• Ethical approval for participating sites • Ethics approval from supporting university • Research governance approval: Site specific approval (SSA) from the participating case study sites

Case selection: Sites and participants	• Purposeful sampling
	  o 4 HCP groups (professionals)
	  o 4 HCP sites (institutions)
	  o 4 geographic locations (rural, inner and outer regional)
	• Purposeful and snowball sampling
	  o HCPs (professionals)
	• Researcher considerations

Data generation and collection	• Recruitment • Field visits • Demographic questionnaire • Semi-structured interviews • Document review • Field notes • Memos

Data analysis: Individual cross-case	• Grounded theory methods:
	  o Coding and categorising of data
	  o Concurrent data collection and analysis
	  o Constant comparative analysis
	  o Storyline
	  o Memo writing
	• Interim case summaries
	• Cross-case analysis
	• Triangulation
	• Diagramming

Data management tools	• Nvivo (version 11) for Mac data management software • Microsoft (MS) Excel • Microsoft (MS) Word

4.2.1 Data Sources

In case study research, drawing on multiple sources is considered paramount for a comprehensive view of the case (Stake, 2006; Yin, 2014). Data sources in case studies are typically observations, interviews, documents and artefacts relevant to the phenomenon being studied (Stake, 2006). Miles et al. (2014) advise gathering information about the construct from varied sources and suggest choosing 'the meatiest, most study relevant sources' (p. 36). Stake (2006) recommends sweeping widely where the researcher can scan different variables and events for correlations and differences that interact within the case. A number of data sources were drawn upon for this case study. The primary source of data was individual HCPs employed at different HCP organisations. Secondary sources included documents, field notes and memos. Table 6 summarises the scope of data sources

Table 6: Data sources and descriptors

Data source	Description
Case study site	HCP (institution): 4 public healthcare facilities Researcher experience and observations of each case context collected in field notes
Case study participants	HCP (individual): Healthcare professionals from 4 healthcare professions Interview transcripts Demographic questionnaire
Documents	Available in the public domain Educational, regulatory, organisational, government focus Other documents specific to NGRNs
Field notes and memos	Descriptive data collected by the researcher as written or typed text and generated from interviews, site visits and reflexive activities throughout the research process.

4.2.2 Case Selection

As discussed in Chapter 3, the decision was made to focus the cases in this research on four public healthcare facilities in Queensland at which the dominant sources of data—individual HCPs—were employed and NGRNs were employed over an extended period. In a collective instrumental case study, selecting cases involves decisions about what and how many sites

are required and who is sampled (Stake, 2006). Stake (1995, p. 4) advises that cases need to 'maximize what we can learn' and in collective case study designs, choosing usual and unusual settings is recommended to understand how a phenomenon presents in different settings (Stake, 2006). Selecting cases that are data rich on the research topic enables the researcher to make reasonable, relevant conclusions or assertions about the phenomenon (Miles et al., 2014; Stake, 2006). Incorporating multiple cases and participants enables exploration of diverse perspectives that deepen the understanding of the phenomenon (Creswell et al., 2007; Stake 2006).

4.2.3 Sample Size

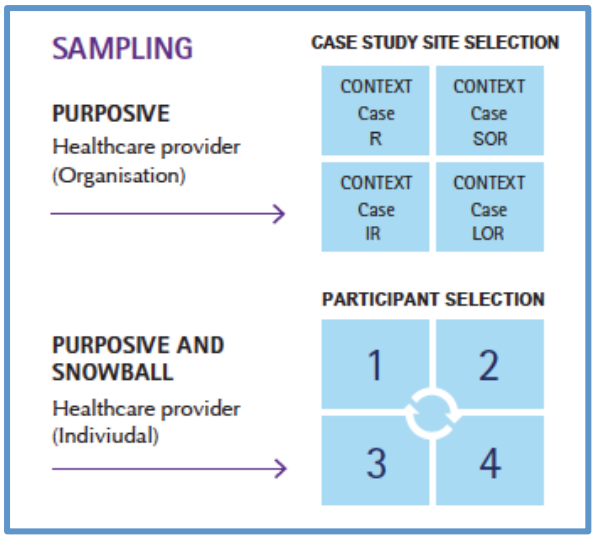
Qualitative research commonly uses small samples studied in depth from within their context (Miles et al., 2014). Obtaining the depth and breadth of data for a rich comprehensive view of NGRN practice readiness relied on having an adequate sample size of HCP cases and participants. Four case study sites were to be included in the study. In studies using multiple cases, Creswell (2014) recommends a minimum of four cases to capture rich understandings of a case. Similarly Miles et al. (2014) suggest 'five richly researched cases as a minimum for multiple case sampling adequacy' (p. 34). The decision was then made to plan for 8–10 semi-structured individual and one focus group interview of 6–8 participants per site with selected participants. This would provide a total of 32 interviews and four focus groups and allowed variation to occur depending on access and availability within each case (Creswell, 2013; Davis et al., 2010; Stake, 2006).

4.2.4 Sampling Procedures

Purposive and snowball sampling methods were employed to select the case study sites and participants (Figure 4). Purposive sampling is often undertaken in case study research and involves selecting the sample for a particular purpose (Miles et al., 2014; Stake, 2006). In the study of contextualised phenomena such as NGRN practice readiness, selection of the places, persons, documents and events to be investigated needs to be specific to the research aim and questions. Narrowing the scope for data collection, purposefully focusing the investigation to address the research aim and choosing accessible cases and participants ensures a manageable boundary, research process and context for investigation that is specific to the topic (Miles et al., 2014).

Snowball sampling involves asking informants to recommend or make referrals to other potential informants, who can then refer on in an ongoing process (Davis, Gallardo & Lachlan, 2010). In this study, diversity in the case study sites and participants was required for an adequate, comparative sample that would be knowledgeable about the topic and provide comprehensive and representative data. Maximising data collection was therefore imperative and snowball sampling of participants increased the scope and number of key informants.

Figure 4: Sampling procedures



4.2.5 Site Selection

In Australia, HCPs (individuals) originate from a number of professions and a range of healthcare contexts. This was a key consideration in selecting the case study sites. Narrowing the focus to create firm boundaries and ensure access to relevant HCPs led to the purposive selection of four case study sites that met the following inclusion criteria:

1. The HCP site has a minimum 2-year history of employing NGRNs. Individual HCPs' perceptions of NGRN practice readiness was the focus of this study; therefore, adequate experience with NGRNs was essential. A 2-year timeframe allowed for experience with a minimum of 2–4 groups of NGRNs.
2. The HCP site is a public HCP governed by one of 16 hospitals and health services (HHS) located in Queensland, Australia. The HHSs are the dominant employer of HCP (individuals) and NGRNs in Queensland (Queensland Health [QH], 2015e).

3. The HCP site employs healthcare professionals identified as participant groups for the study.
4. HCP sites were classified within a geographic location determined by the Australian Standard Geographic Classification (ASGC) Accessibility/Remoteness Index of Australia Plus (ARIA+) and grouped within one of the four Remoteness Area (RA) classifications (Australian Bureau of Statistics [ABS], 2014) listed in Table 7.

Table 7: ASGC ARIA+ RA classifications

Classification	Index Range	Location
Major city [MC]	**ASGC-RA1** 0–0.2	Relatively unrestricted accessibility to goods and services
Inner regional [IR]	**ASGC-RA2** >0.2–2.4	Some restrictions to accessibility of some goods and services and opportunities for social interaction
Outer regional [OR]	**ASGC-RA3** >2.4–5.92	Significantly restricted accessibility of goods and services and opportunities for social interaction
Remote [R]	**ASGC-RA4** >5.92–10.53	Very restricted accessibility of goods and services

ARIA+ is the successive index to ARIA, a geographical approach to measuring remoteness in Australia (ABS, 2014). ARIA+ is the standard measure used by the ABS (2014) to determine five RA classes (ABS, 2014). Road distances between populated localities and service centres measure remoteness. Distances are classified in five divisions with scores ranging from 0 (high accessibility) to 15 (high remoteness) (AIHW, 2004; ABS, 2014). While there is a range of classification systems, ARIA+ is accepted as one of the most unambiguous and conceptually clear geographic measures of remoteness in Australia (ABS, 2014; Australian Population and Migration Research Centre [APMRC], 2014). Using this classification enabled selection of a healthcare site and readily identifiable boundary for each case.

The classifications were selected as the majority of healthcare institutions classified in these areas in Queensland employ NGRNs (QH, 2015e). Exploration of other prominent national classification systems was also undertaken to verify geographic diversity (Australian

Government Department of Health [AGDOH], 2015; Mason, 2013). Table 8 presents a comparative view of the four HCP sites including these classification details. Appendix 2 provides an explanation of each of the classification systems listed in the table. The purpose in consulting these was to further confirm that the selected HCP sites met the inclusion criteria and would generate data for a diverse perspective on NGRN practice readiness.

Table 8: Case selection and classification details

Case		**Case 1 [R]**	**Case 2 [SOR]**	**Case 3 [IR]**	**Case 4 [LOR]**
Description		Remote HCP	Small outer regional HCP	Inner regional HCP	Large outer regional HCP
Classification	**ASGS-RA** Australian Statistical Geography Standard-Remoteness Area	**ASGS-RA4** Remote [A+ 6]	**ASGS-RA3** Outer regional [A+ 4]	**ASGS-RA2** Inner regional [A+ 2]	**ASGS-RA3** Outer regional [A+ 3]
	MMM Modified Monash Model	6	4	2	2
	RRMA Rural, Remote and Metropolitan Areas	6 remote centre	5 other rural area	3 large rural centre	2 other metropolitan
	DWS Districts of Workforce Shortage	Yes	No	Yes	No
	SA Statistical Area	SA2	SA2	SA2	SA3

Access to the HCP site and participant recruitment was also considered in the selection process. Identifying a contact person to assist in negotiating access is pivotal to being able to successfully conduct this type of case study research (Stake, 2006). Choosing accessible cases enables a manageable boundary, research process and context for investigation (Miles et al., 2014). As recommended, an individual holding a central role within each case study site was identified early in the planning phase of the research. These individuals helped to facilitate the initial organisational approval for the study and subsequent access to and recruitment of participants. Initial plans to include a metropolitan site were not fulfilled as attempts to secure an onsite contact person and approval for the research were unsuccessful. The decision was made to seek access and approval at a large outer regional [LOR] site with a different ARIA+ score that, because of its location and service capacity, functioned similarly to a metropolitan site and dissimilarly to the smaller outer regional site chosen as case 2 for this study.

4.2.6 Participant Selection

HCPs' perceptions of NGRN practice readiness were the focus of this case study. NGRNs work with a range of healthcare professionals in different capacities. Elo et al. (2014) emphasise that samples must be appropriate to 'elicit trustworthiness of qualitative data analysis' (p. 4). Inclusion criteria (Table 9) were developed to focus the recruitment to healthcare professionals who would represent and be the most knowledgeable in response to the research aim and questions. Following review of the four HCP sites, the workforce and existing models of care, four groups of individual HCPs were identified as those who frequently interact with NGRNs and would be the most informative about NGRNs' practice. The participants for this case study that met the inclusion criteria are presented in Table 9, where the rationale for their engagement is explained.

Table 9: Participant inclusion criteria and rationale for engagement

Inclusion criteria		**Rationale for engagement**
1. Employed within one of four case study sites selected for the research		Maintain the focus and boundary of the case
2. Nursing (N) professionals	RNs of all levels with >1 year of practice and a minimum of 2 years experience with NGRNs	Dominant HCP group working with NGRNs Have the most frequent interactions and the longest, closest and most relevant experience with NGRNs during their first year of practice. Considered critical informants for the study because of their diverse experiences with NGRNs
	EN >1 year of practice as an EN Registered to practice	ENs works with NGRNs in a different capacity to that of the RN. They are junior in seniority to NGRNs and delegated workloads by NGRNs. They are knowledgeable in fundamental clinical practice and known to guide NGRNs in practice. Given their relationship and position, ENs can offer insights into different aspects of NGRN standards of practice
3. Medical (M) professionals 4. Allied Health (AH) professionals		Work with NGRNs in a different capacity from that of RNs or ENs. Perceptions likely to vary given the varied relationships, responsibilities and interactions AH and M professionals could offer unique insights to extend our understanding of NGRN practice readiness
5. Human Resource (HR) professionals		Involved in the recruitment of NGRNs in varying capacities May confer with NGRNs on challenges related to their performance Provide another perspective on NGRN practice readiness, particularly in relation to performance or issues experienced during NGRNs' first year of practice and the process to determine NGRN practice readiness

Inclusion criteria cont.	Rationale for engagement
6. HCP department heads (DHs): Service executive and managers	Group holds responsibility for the management, governance and delivery of healthcare from an institutional and service perspective. Organisational responsibilities include ensuring the safety of clients, quality of care, staffing and resource allocation. NGRNs are integral to these processes
These participants fall into the above HCP groups however may or may not be clinically active and working alongside NGRNs	May hold preconceived ideas of staff performance for safe, cost-efficient health service delivery that meets legislated and government policies. Perspectives could yield important insights into the context of practice and contextual influences related to defining NGRN practice readiness and HCP expectations in specific contexts

4.2.7 Ethical Considerations

Knowledge of ethical conduct in research and completion of the required processes is critical to ensure participants are accurately informed, protected and respected (National Health and Medical Research Council [NHMRC], 2015). Adhering to ethical standards helps preserve the research outcomes as 'morally and methodologically defensible' (Stewart, 2014, p. 151). In Australia, the NHMRC and the Australian Research Council (ARC) in collaboration with Universities Australia (UA) govern the conduct of research (NHMRC, 2015). Their foremost purpose is to maintain the highest standard of quality and integrity in the conduct of research and the protection of the public (ARC, 2015; NMHRC, 2015; UA, 2013). Promoting 'ethically good human research' requires the researcher to adhere to ethical principles and values outlined within the 2007 *National Statement on Ethical Conduct in Human Research* (Updated May 2015) (the *National Statement*) (NHMRC, 2015, p. 9). These values and principles include research merit and integrity; justice, beneficence and respect for human beings (NHMRC, 2015, pp. 9–11). Adherence to these ethical standards throughout the conduct of this research ensured that respect for human beings and their intrinsic value is embedded in the research. Consequently, the trust, responsibility and safety of participants were at the forefront of the research (NHMRC, 2015).

Ethical Approval

Permission to conduct this study was obtained on 15 September 2015 from the Townsville Hospital and Health Service (THHS) Human Research Ethics Committee (HREC) (HREC Reference number: HREC/15/QTHS/131) (Appendix 3). Following confirmation of ethical

approval from THHS HREC, approval was then sought and obtained from JCU HREC (JCU Approval number: H6433) (Appendix 3).

As a multiple case study, ethical approval was required from the HRECs of the four case study sites and the university supervising the researcher conducting the study. HREC approval was sought through a national multi-site research ethics process whereby one HREC is nominated as the HREC responsible for conducting the ethical review and approval on behalf of all case study sites (Queensland Government [QG] Office of Health and Medical Research [OHMR], 2010). Recommended by the NHMRC (2015) this process aims to minimise duplication and improve efficiency in ethical review and approval (p. 70). The process began with the completion of the NHMRC's National Ethics Application Form (NEAF), which was then allocated by the QH Central Coordinating System (CCS Booking Reference 15/QHC/2740) to the THHS HREC, one of the four HRECs associated with case study sites chosen for this study. As a requirement of this process, written confirmation acknowledging support for the study was obtained from each of the four case study sites and included in the ethics application process.

Research Governance

Prior to commencing a human research project, research governance approval from each case study site is required (NHMRC, 2015). Research governance practices provide the platform for responsible conduct of research (ARC, 2015; NHMRC, 2015). An effective research governance framework ensures that compliance with specific codes of practice, regulations, laws and ethical and contractual obligations between institutions, researchers and participants are upheld, and establishes acceptable academic standards for research (ARC, 2015).

Research governance approval for each site was granted progressively between November 2015 and January 2016. Meeting research governance requirements involved the submission of a Low/Negligible Risk (LNR) site specific assessment (SSA) application to the research governance office (RGO) associated with each case study site. The SSA determines 'the level of support and suitability of a research study to be conducted and completed at a site' and makes transparent the financial accountability for effective budget planning (QG OHMR, 2010, p. 3). All details of the study protocol, estimated time, cost and participant numbers were provided as part of the application. Consideration was also given to the legal

implications regarding the use of the findings. As part of the research governance process, research contracts between the university, researcher and RGOs at each site were established (QG OHMR, 2010). The HREC and research governance SSA approvals formulated the final documentation provided to the four HHS chief executive officers authorising permission to conduct the research at the respective sites.

Consent

In obtaining consent, recommendations in section 2, specifically sections 2.2 and 2.3, of the NHMRC *National Statement* guided the consent process ensuring adequate information was disclosed for understanding and a voluntary, informed decision to participate (NHMRC, 2015, p. 16). An explanatory statement about the study was presented to all informants and personnel responsible for providing access to the site and organisational documentation (Appendix 4). The statement outlined the study and included an explanation of voluntary participation, confidentiality and anonymity of participants and data, data storage and use of information, withdrawal and support available during the study (NHMRC, 2015, pp. 12–21). With the aim to establish mutual understanding between the participant and researcher, participants were afforded the opportunity to ask questions and verify details prior to agreeing to participate (NHMRC, 2015, p. 16). Written informed consent was obtained prior to participation (Appendix 4) and verbal consent was consistently verified throughout the research. Israel and Hay (2006) suggest that consent be a 'dynamic and continuous' process (p. 64) rather than one that is obtained only at the beginning of a research. These measures provided continued respect to human dignity and regard to participants informed choice to participate and the opportunity to ask questions or opt out if required.

Confidentiality, Privacy and Anonymity

Sections 1, 2, 3.1 and 3.2 of the NHMRC *National Statement* inform measures to protect the confidentiality and identity of informants during interviews, discussions and when using data, particularly informants' quotes (NHMRC, 2015). These measures ensure that the principle of justice and human dignity are applied throughout the research process and that participants, and their decisions and responses, are protected and respected. In some cases, the characteristics of the HCP sites could potentially reveal the location, and for participants, their position title and location could reveal their identity. Therefore, all data collected, recorded and stored were de-identified to ensure raw data could not be traced back to

participants. Numbers, non-descript position titles and health professional groups were used to identify case study sites and participants. Where required and with permission, organisational documents were modified and de-identified of any specific location data.

Consideration of confidentiality and privacy was equally important where discussion of the research was conducted in a public forum or a formal presentation and where narratives or descriptions of the case were used (Connelly, 2014; Farquhar, 2012). In these situations, the case study sites were not disclosed. In snowball sampling, where links between samples are made, anonymity may be compromised and in some instances not guaranteed (Ritchie & Lewis, 2003). Similarly, in focus groups where there is open disclosure of information in a group, anonymity and confidentially cannot be assured. Careful consideration was given to these situations and where necessary, participants made aware prior to seeking others to participate. In the focus group, confidentiality was requested and explained to minimise disclosure.

Databanks and Storage

Following the NHMRC recommendations related to qualitative research and databanks (NHMRC, 2015, p. 27) all data were systematically recorded and securely stored at all times. During fieldwork, storage of field notes, memos, audiotape and documents were secured in a locked briefcase retained by the researcher. Electronic data were stored on a password-protected computer and hard copies in a locked filing cabinet in a secure environment, accessible only by the researcher. During and after the research process, accurate records of all methods, data sources and analysis was maintained in a durable, retrievable format, securely stored as stated above, and periodically viewed by the principle supervisor. These measures protect participants' privacy, the integrity and merit of the research and again uphold the principles of beneficence and human dignity.

At completion of the study, all original data will be stored in the archival section of the discipline of Nursing and Midwifery, College of Healthcare Sciences, Division of Tropical Health and Medicine at JCU, Cairns Campus. Storage will be retained for a minimum of 5 years from the end of the year of publication of any form of public release of information based on the data, outside the university (JCU, 2012). As per JCU's *Code for the Responsible Conduct of Research* (JCU, 2009) relating to the retention of specific types of

materials and data, signed consent forms cleared through the JCU's human ethics process will be retained for 15 years.

4.2.8 Risk Management

Consideration was given to recommendations in the NHMRC *National Statement* related to risk and benefit (NHMRC, 2015). A risk management plan with contingency strategies was developed to ensure areas of risk were identified and minimised to protect the welfare of participants and the integrity of the study. The plan addressed potential risks associated with participants, primarily related to ensuring that ethical protocols and principles, including beneficence and non-maleficence were maintained. For example, while the risk of distress from reliving or describing difficult or challenging issues with NGRNs or as a NGRN were low, the potential was considered and contact details for counselling services located at each site and the university were made ready. Risks to the study focused on ensuring the objectives were achievable and alterations to data collection, analysis and timeframes addressed. Finally, risks to the researcher, where factors related to fieldwork for data collection such as travelling and being in unfamiliar areas, could compromise the researcher's safety.

4.3 Data Generation and Collection

The primary data generation and collection for this study occurred between December 2015 and May 2016 during site visits where the researcher travelled to each HCP site and spent 5–8 days onsite. Each case was explored using the same processes and methods to recruit, generate, collect, document, analyse and manage the data. In multiple case studies such as this one, continuity in the inquiry process is imperative to a quality outcome. One of the key reasons for doing a multiple case study is to make meaningful comparison across cases, which enhances the reliability and trustworthiness of the findings (Stake, 2006; Yin, 2014). Without similarity in the data generation, collection and analysis, the strength of this comparison can be reduced and undermine the cross-case analysis (Miles et al., 2104; Stake, 2006; Yin, 2014). Stake (2006) recommends that having some structure to manage the research process is necessary; however, not so much that it is constraining. In addition, some level of structure is advised when only one researcher is investigating multiple cases and when that researcher is a novice (Miles et al., 2014; Stake, 2006). A semi-structured approach for managing multiple case studies is often recommended as this allows the

researcher some flexibility yet maintains continuity to strengthen the comparative analyses (Miles et al., 2014; Stake, 2006). Table 10 presents a collation of the amount and type of data generated and collected for analysis.

Table 10: Data generation and collection

	Case 1	Case 2	Case 3	Case 4	Total
Days on site	6	5.5	5.5	8	25
Total participants: HCP	16	16	18	17	67
Number of interviews	16	16	18	15	65
Number of focus groups	0	0	0	1	1
Field notes (no. pages)	50	52	60	51	209
Memos on site	42	26	13	12	93
Documents reviewed	4	7	6	5	18

4.3.1 Participant Recruitment

A total of 67 participants consented to participate in the study. Following ethics and governance approval participant recruitment commenced with case 1 with subsequent cases following the same process. Three to four weeks prior to the site visit, telephone and email contact was made with the site-based contact person where details of the site visit and recruitment procedures were clarified and confirmed. The contact person notified the department heads (DHs) of the HCP groups involved in the study, who were then contacted by the researcher via email and telephone. The site visit and recruitment process was clarified; questions about the study addressed and a time to meet during the site visit scheduled. An electronic invitation and flyer inviting staff to participate in the study was forwarded to the contact person and DHs, who then circulated these throughout the respective HCP groups. At this point, the contact person at each site organised tangible and informational resources that supported the field visits and conduct of the research on site. This included access to interview venues, guidance on the HCP's systems and processes, and opportune introductions to key individuals within the organisation.

Individual HCPs interested in participating in the study were asked to contact the principal researcher via email. On email contact, participants were sent the explanatory statement and consent form and contacted by telephone. During this conversation, confirmation that the

participant met the inclusion criterion was established and participants were given the opportunity to ask questions about their participation. Consenting participants completed the written consent form and an interview appointment was negotiated. This initial telephone conversation helped to establish a relationship and build rapport with the participant in preparation for their interview. Establishing a rapport with participants is vital to ensure participants feel comfortable to openly converse with the researcher during interviews and share information (Stake, 2006).

Telephone calls made prior to the site visit and onsite presence strengthened local engagement and was beneficial in raising enthusiasm and attracting participants. During the site visit, recruitment of participants was improved with snowball sampling. For example, initial recruitment for case 1 [R] generated six interviews being scheduled prior to site visits. For the remaining three cases, one to three interviews were scheduled prior to the site visit. These sites relied more heavily on snowball sampling. The contact person, DHs and participants identified or contacted other individual HCPs who might be interested in participating in the study. These participants contacted the researcher and were informed of the study and invited to participate. Snowball sampling was particularly useful in recruiting M, AH and HR professionals.

4.3.2 Semi-structured Individual and Focus Group Interviews

A semi-structured format using a series of open-ended questions developed from a review of relevant literature was employed for the individual and focus group interviews (Appendix 5). The questions were broad and developed with the aim of addressing the research questions. In total 65 individual and one focus group interview of two participants was conducted with consenting HCPs. Each interview was 35–75 minutes in duration and conducted via a medium of the participant's choice: face-to-face, Skype video call or telephone. Face-to-face interviews were preferred because of the ease of relationship and rapport building that can bring forth frank and detailed disclosure of information (Legard, Keegan & Ward, 2003). Telephone interviews were conducted where time constraints prevented face-to-face interviews or video calling software was not available. Interview mediums are summarised in Table 11.

Table 11: Interview mediums

Medium	Case 1	Case 2	Case 3	Case 4	Total
Face to face	14	16	14	14	**58**
Skype	0	0	1	1	**2**
Telephone	2	0	3	2	**7**
Total HCPs	**16**	**16**	**18**	**17**	**67**

Interviews are a mainstay of data generation and collection in case studies because of their usefulness in being able to delve into the participants' experience for rich, in-depth data about a phenomenon (Denzin & Lincoln, 2011). Interviews can vary in approach; however, the core attribute is the opportunity to explore and capture the participant's ideas within their own sense of reality (Denscombe, 2014; Stake, 2006). This principle was important for this study. A semi-structured format of broad questions also provided direction in the line of inquiry yet the flexibility to probe and explore for other ideas, another important consideration for this study (Miles et al., 2014; Stake, 2006). In a semi-structured interview, the questions remain constant but may be posed in different ways or sequences. Consequently, the interviewer is able to focus the inquiry on the topic without limiting the scope of participant responses (Nagy, Mills, Waters & Birks, 2010). Using a structured approach would have restricted the ability to explore new ideas and reduced the depth of data. Similarly, an unstructured approach may not have provided data relevant to the aim of the study (Nagy et al., 2010).

The venue for interviews was also carefully considered including those conducted by phone and Skype. Venues that were quiet, discreet and physically comfortable in locations convenient to the participants were preferable. These environments focus the discussion and help maintain comfort and safety in disclosure (Denscombe, 2014; Yin, 2014). Further, venues on site but away from the clinical area were favoured in face-to-face interviews. This abated the pull for HCPs to return to the floor to address clinical demand. Commonly, onsite interviews were conducted in the researcher's office or participant's manager's office.

Interview Process

At the point of interview, participant's understanding of the research study was clarified verbally and written consent confirmed. The interview procedure was explained and

demographic data collected on a brief standardised questionnaire designed by the researcher (Appendix 7). The questionnaire was de-identified using a unique identifier known only to the researcher. Data collected included the participant's biographical and background information including their years of experience working with NGRNs. Demographic data were important to this study as they added to the context of the case and framed the participants' responses (Stake, 2006). An individual's background can influence behaviours, perceptions and how knowledge is constructed (Charmaz, 2006; Hyslop-Margison & Strobel, 2008). The questionnaire also worked as a warm-up for interview where a level of comfort and ease in the flow of conversation was established.

Using the interview guide questions were posed and, depending on the participant, phrased or sequenced differently. Inductive probing was used to explore ideas related to the topics as they arose (Charmaz & Belgrave, 2012). Probe-based questions can evoke interviewee comment about topics that enable open sharing of experiences related to the specific area about which the researcher is seeking information. Questions for HCPs working with NGRNs were designed to generate descriptive responses, details and examples of NGRN performance specifically related to the research questions. In meetings with DHs, up-to-date information about NGRNs and the organisational features of the HCP site were probed to generate data about the context of each case. In conjunction with documentary evidence, DH's responses helped to formulate a rich contemporary view of the case contexts. Participants seemed genuinely interested in the research study and keen to share information, and often shared extensive, carefully considered responses to the interview questions.

Only one focus group interview with two HCPs was conducted. In focus groups, individuals come together to respond to questions about the research topic (Finch & Lewis, 2003). Moderated by the researcher, the interactive discussion can generate new information or different perspectives as each member compares and contrasts their experiences (Finch & Lewis, 2003; Yin, 2014). While more focus group interviews would have been beneficial, workload, time and personal constraints made it challenging to gather HCPs for focus groups, particularly those from different health professions. Attempts to conduct focus groups at case 1, 2 and 3 were unsuccessful. The two participants in the focus group that was conducted worked in complementary roles related to NGRNs. Interviewing them together enhanced and extended the clarity and depth of information provided. The

conversation flowed easily and the participants triggered each other in sharing relevant examples.

Notes were generated during and after each interview, which were scheduled specifically to allow the researcher to prepare for interview and to memo thoughts after interview. This timing is highly recommended to capture ideas about participants' responses and refocus in preparation for the next interview (Miles et al., 2014; Stake, 1995, 2006). In interviews conducted with DHs overseeing NGRNs, detailed handwritten notes were taken of responses and transcribed into MS Word documents by the researcher. Responses from this group were more focused on context factors, brief and easily recorded. While not the case for DH interviews, extensive notes taking during interviews can be distracting or make the participant feel uneasy (Miles et al., 2014). For this reason, in audiotaped interviews, note taking was restricted to noting words and phrases parallel to the interview question. Immediately following each interview, handwritten notes were reviewed and key words highlighted. These were later transcribed into a MS Word document and imported into Nvivo (version 11) for Mac data management software, for later analysis.

During interviews, a researcher's behaviour can influence participant responses both positively and negatively (Denscombe, 2014). With the aim to minimise influence and demonstrate neutrality, the researcher was careful with respect to verbal and non-verbal cues communicated during the interview process. As a novice researcher concerned with this issue, the researcher revisited the recording of the first two participant interviews conducted in case 1. The outcome of this review alleviated any concerns of undue influence. Features to strengthen the researcher's interviewing technique were identified, which led to richer participant responses in subsequent interviews.

Audio Recording

Interviews were audiotaped and transcribed verbatim for analysis, except for those conducted with DHs. Audio recording is recommended to enable attention to be focused on the interviewee (Lewis & Ritchie, 2003). Written and verbal consent for audio recording was confirmed with participants prior to interview. The purpose was explained and confidentially assured. This worked towards establishing trust, comfort and openness in the interview (Lewis & Ritchie, 2003). Two Olympus digital voice recorders were used (DM-901; VN-733PC) and recordings were deleted after transfer to a secure storage database. The

recording captured the language exchange and interaction between the researcher and participant, and was particularly useful for analysis where emotive nuances in expression, tones and volume such as whispering responses were informative in the interpretation of data (Borbasi & Jackson, 2012). Transcripts were de-identified using the same unique identifier used on the questionnaires, and reference to the participant, HCP site and location within the transcript removed. The unique identifier helped to align data sources and attribute data fragments used as evidence in the reporting of the findings.

4.3.3 Documentary Evidence

Documentary evidence in the form of written text and webpages was used in this case study to inform the research design; augment, supplement and verify interview data; and establish the contextual background to interpret other case study data. Documents are advantageous sources of data as they persist in a stable form that can be repeatedly reviewed; are non-intrusive and cost effective; and can be specific or broad with respect to aspects of the case study (Denscombe, 2014; Yin, 2014). Limitations in using documentary evidence relate to the selectivity, diversity and accessibility and credibility of documents (Denscombe, 2014; Yin, 2014).

In this study, collecting documentary evidence commenced early in the planning of the research and continued throughout the research process. Documents available in the public domain were retrieved via the Internet and focused on national and state-wide government, educational, regulatory and organisational documents relevant to NGRNs and HCP sites. Documents retrieved were checked for quality and authenticity prior to use; itemised and reviewed where relevant data were highlighted; retyped; and coded and categorised for use. Baseline sets of documentary evidence were sourced for each case to ensure balance and continuity in data sourced across cases; for example HHS annual reports, QH facility and NGRN-specific websites. As the research progressed through each case, the framework expanded where documents found for one case were sought for subsequent cases. During site visits, participants also volunteered unique organisational specific documents as electronic and hard copy. These included NGRN program and employment policies, a staff survey for one case and, in two cases, quality strategies related to the HCP organisations.

4.3.4 Field Notes

Field notes are notes made by the researcher while immersed in the setting of a case study (Stake, 2006; Yin, 2014). Field notes assist in collecting information and serve as a reflexive tool to record data collection and decision-making (Arthur & Nazroo, 2003). Written text can be analysed together with documents and interview transcripts for content that clarifies and corroborates data collected from other sources (Stake, 2006). Review and reflection on field notes for self-connections is also essential to developing insightful research practice (Birks, 2014; Simons, 2009).

In this case study, field notes in the form of handwritten and typed notes were generated from the researcher's discussions, interviews, observations and reflections. Being onsite and interacting with staff enabled observation of the physical, social and cultural characteristics of the environment. Observation can provide a way of noting specific features of a setting or situation, which can help contextualise the phenomenon being investigated (Miles et al., 2014). Spending time in the local community provided first-hand experience of the community and the geographical location of each site. This provided clarity and deeper insight into the context in which participants were supporting NGRNs and facilitated greater understanding of their interview responses. Observational descriptions also provided information that helped build rapport with participants at interview. Field notes also included concept maps, models and diagrams of emerging ideas and connections. Checklists and worksheets functioned as a memory aid and supported an organised approach to collecting information for subsequent data collation and analysis.

4.4 Data Analysis

Data were analysed using selected grounded theory methods of concurrent data collection and analysis; coding and categorising of data; constant comparative analysis; storyline; and memo writing (Birks & Mills, 2015; Charmaz, 2006). In grounded theory, researchers build theory grounded in data generated with those who have knowledge of the phenomenon (Birks & Mills, 2015). The inductive, iterative and interactive process of analysis works to bring the researcher to a more integrated, conceptual understanding of concrete realities within the data (Charmaz & Belgrave, 2012). The purpose of using these methods in this case study was not to produce a theory but rather to systematically generate, analyse and integrate a high-quality description of the cases that were representative of the phenomenon

being studied. In case study, employing a logical, systematic and well-documented approach to data management and analysis is highly recommended (Flyvbjerg, 2011; Merriam, 2009; Stake, 2006; Stewart, 2014; Yin, 2014). Given the capacious nature of the qualitative data generated for this study, a systematic strategy to manage and analyse the data was required. These methods helped keep the data set manageable (Charmaz, 2006). Using the same approach to analysis in each case also strengthens the cross-case analysis and subsequent credibility of research findings (Stewart, 2014; Stake, 2006; Yin, 2014).

The grounded theory methods used in this study are described in Box 2 and resonate with the constructivist orientation of this research (Stake, 2006). Each step of the data analysis works towards building knowledge and understanding of each case whereby information is revealed as the case unfolds (Cronin, 2014; Stake, 1995). Concurrent data collection and analysis intensifies the iterative process by identifying new or unseen areas for further investigation (Cronin, 2014; Stake, 2006; Yin 2014). Using these methods resulted in the desired iterative, yet organised, process of analysis. Merging case study and grounded theory methods in managing and interpreting the data helped to keep a steadfast framework around the data collection generation and analysis that facilitated a flexible and creative interpretation of data.

4.4.1 Analysis Process

Each case was analysed individually and then collectively for associations, patterns, commonalties, differences and explanations that progressed to broad substantial categories (Miles et al., 2014; Stake, 2006; Yin, 2014). Using initial, intermediate and advanced coding methods (Birks & Mills, 2015), categories were developed inductively and progressed the interpretation of the data. Data analysis occurred concurrently with data collection and with reference to field notes, memos and documents. As one case was analysed, data collection commenced for the next. The coding process and framework for case 1 informed the analysis in subsequent cases in preparation for the cross-case analysis. While the analysis was organised and systematic, it was not linear and involved constant comparison and movement back and forth across and between data and data sources (Figure 5). Constant comparative analysis creates a dynamic and constant review of data and conceptual meanings as it is continually collected and analysed. This process refines the analysis to a more conceptual level and facilitates the identification of key categories.

Box 2: Selected grounded theory methods

Concurrent data generation or collection and analysis:

- Each series of data generation and collection is analysed and coded concurrently
- This guides the process of further data collection and analysis

Coding and categorisation of data:

- Over a series of coding stages (initial or open, intermediate, advanced) data are brought to a more abstract, conceptual level in categories
- During data analysis, words or groups of words are identified and labelled (coded)
- Nvivo codes (informant words) are used to code ideas if evident
- As coding continues, groups of related codes are brought together in categories
- Categories are saturated when no new data that explain the category emerge

Constant comparative analysis:

- Systematic continuous comparisons conducted throughout the inquiry
- Comparison of data to identify links, associations, binding ideas or conversely unique stand-alone concepts
- Examples: incident to incident, statement to statement and codes to codes, codes to categories, categories to categories and so forth
- Aligns with triangulation of data

Storyline:

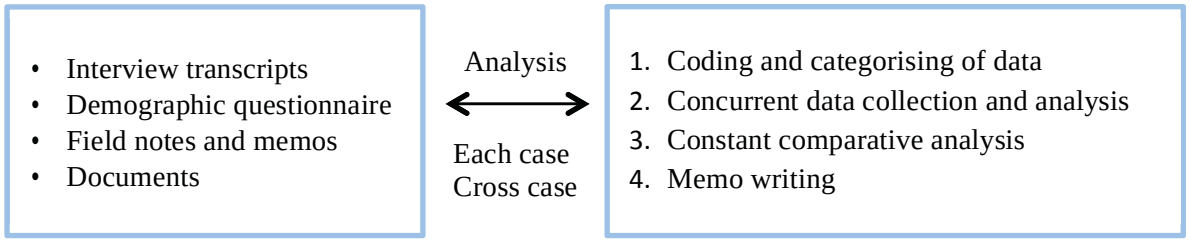
- Aligns with forms of narrative analysis and storytelling in interpretive research
- Can be used to source data or convey the research findings
- In grounded theory the focus is on coherence, continuity and integration where the dual purpose is to produce and convey a theory

Memo writing:

- Part of the developing analysis where the researcher records their thinking, ideas and decision making during data collection and analysis
- Assists to formulate links and connections between the data analysed
- Becomes a part of the evidence trail and record
- Unique to the researcher; therefore varies in breadth and intensity
- Facilitates the researcher's ability to be reflexive
- Formulates part of the quality foundations of the research

Source: Birks & Mills, 2015; Charmaz, 2006; Charmaz & Belgrave, 2012; Creswell, 2013

Figure 5: Data analysis



Coding and Categorising Data

Data analysis began with the MS Word version of the interview transcriptions being imported into Nvivo (version 11) for Mac data management software. Each interview transcript was read and reread, and initially coded line by line or in short segments, to open up the data (Charmaz & Belgrave, 2012). For example, definitions, incidents, characteristics, processes, contextual influences and common expressions were assigned a code word or phrase to describe the meaning of the text. Referred to as initial or open coding, these codes changed and evolved through the process of constant comparison between codes. This process resulted in the initial set of codes and exposed preliminary meanings and concepts prevalent in the data, which were continually coded and categorised. This ongoing process required constant reviewing and revisiting of interview transcripts and data. Subsequent incidents, codes, categories and concepts were continually compared, contrasted and coded as they were identified (Birks & Mills, 2015; Denscombe, 2014). This constant movement and comparison progressed initial codes into an intermediate, focused form of coding. In this process, clustering and collapsing of codes occurred where patterns and associations between codes and codes that cut across all data sets were identified and subsumed into broader codes (Birks & Mills, 2015; Charmaz, 2006). As the process continued with each interview and each case, new links between data were identified to formulate more conceptual meanings where broad categories and subcategories began to take shape.

Over the course of analysis, attention was focused on final categories that were considered central to understanding the case and addressing the research questions. This constant comparative analysis strengthened the data saturation process to refine the coding and formulate the final categories in the individual case and the subsequent cross-case analysis (Birks & Mills, 2015; Saldana, 2013).

Narratives and Interim Case Summaries

Narratives are a descriptive account of what the researcher understands is happening in the data. An interim case summary is a preliminary overall account of the case that presents the findings and 'synthesizes what the researcher knows about the case' (Miles et al., 2014, p. 132). Narratives were written about the context, interview participants and major categories of each case. Short interim summaries were written about each case as they were finalised. The narratives and summaries assisted the cross-case analysis and contributed to the final reporting process (Miles et al., 2014; Stake, 2006).

Cross-case Analysis

Following individual case analysis, the cases were analysed collectively to establish the final major categories (Miles et al., 2014; Stake, 2006; Yin, 2014). Cross-case analysis involves comparing and contrasting the findings of each case across cases for similarities, differences and uniqueness for a deeper, more comprehensive understanding of the topic. Cross-case analysis engages the researcher in developing cross-connections between cases and related concepts for interpretation in terms of a broader collective case (Khan & VanWynsberghe, 2008). These new connections 'produce new knowledge and augment existing knowledge and experience' (Khan & VanWynsberghe, 2008, p. 4). Findings from the cross-case analysis can then be reviewed against the individual case for congruence, giving an indication of the power of the cross-case analysis (Stake, 2006).

Nvivo and MS Excel spreadsheets were used to manage the data and facilitate the analysis and integration of the data. Using the research questions as a guide, the case summaries and major categories from each case were reviewed for patterns, commonalities and differences. As the codes and categories of each case were compared and contrasted, the individual case analysis became more reductive where the particularity of each case was reduced, and codes and categories were clustered and collapsed to broader categorises. Constant comparison again refined the analysis process. The most significant categories were identified and considered for their congruence in light of the individual cases (Stake, 2006). Once completed, the collective categories that addressed the aim and research questions were determined. At the final interpretive stage, these are the findings that are reported in a collective case study (Stake, 2006). The collective findings from this study informed the final recommendations from this research, which are presented in Chapter 11.

4.5 Synthesising and Managing Data

4.5.1 Triangulation

Central to the individual and cross-case analysis was triangulation of methods and data (Miles et al., 2014). Triangulation occurs when data sources, researchers, methods (within and between) and/or theory are combined, compared and contrasted within and across cases at different levels during analysis (Miles et al., 2014; Stake, 2006; Yin, 2014). In case studies, particularly multiple case studies, triangulation is highly recommended as it helps to strengthen the depth, reliability and confirmability of the findings (Creswell, 2014; Merriam, 2009; Stake, 2006; Yin, 2014). Ritchie and Lewis (2003) suggest that the use of multiple methods and data to inform the analysis works towards validating qualitative evidence and strengthening interpretations. As such, triangulation can 'check the integrity of inferences drawn from the data' (Ritchie & Lewis, 2003, p. 46). Triangulating of data from one source can verify data gained form another source or through a different method (Yin, 2014). In this study, coupled with the use of grounded theory methods, data from all data sources were continuously compared and combined to gain a comprehensive understanding of HCPs' perspectives of NGRN practice readiness. Data sources complemented each other to help verify, enhance and clarify outcomes. For example, field notes augmented documentary evidence related to context, and documentary evidence supplemented interview data about NGRNs' performance and context of practice.

Triangulation can bring together multiple perceptions to clarify meanings, identify differences and verify repeatability (Miles et al., 2014; Stake, 2006). In this case study the perspectives of multiple HCP groups, in different locations working with NGRNs in different capacities, brought together a broad range of views about NGRN practice readiness. This facilitated the identification and verification of patterns, connections and process that emerged in the data analysis. Being able to draw on sources across cases further strengthened these lines of inquiry, refined the coding and conceptualised the analysis.

Methodological triangulation occurred through use of a variety of data collection methods. Collecting and generating data through participant interviews, focus group, field notes, memos and documents provided a diverse compendium of methods to ensure a thorough view and verification of findings. Miles et al. (2014) and Stake (2006) recommend data analysis and interpretations are also checked with a critical colleague or participant. Such

reviews can provide input and verification on the soundness of the processes and interpretations of data. In this study, on completion of each interview, key points from the interview that were noted in the researcher's field notes were clarified with the participant for verbal confirmation of their meaning and accuracy. Repeated reviews of transcripts (reading and listening) and gaining the input of supervisors on coding and categorising enabled clarification of analysis and guidance on the research process, and challenged perceptions and thinking about the data (Miles et al., 2014; Stake, 2006).

4.5.2 Storyline

Birks and Mills (2015) describe storyline as 'a strategy for facilitating integration, construction, formulation and presentation of research findings' (p. 180). In this study, the purpose of using storyline was to create a cohesive narrative of the findings of the collective case. Similar to process tracing (George & Bennett, 2005) where causal paths or progressive events are detailed in a narrative of the unfolding of a story, storyline has the advantage of enabling the researcher to bring ideas together, make sense of the data, evaluate for gaps in the analysis and discern relationships among data (Birks & Mills, 2015). For this reason, storyline is valuable for simplifying the integration of the data. In this case study, storyline refined the final analytical product to a more conceptual level. For each case, narrating the story of the major categories helped to clarify and refine the major categories for cross-case analysis. Storyline was particularly useful in clarifying the process of how NGRNs are determined to be practice ready and developing a collective case description of HCPs' perception and definition of practice readiness. Similarities and irregularities or unique features were more readily identified. Bringing the final major categories together using storyline created an organised, cohesive narrative about NGRN practice readiness that readily aligned with the research aim and questions.

4.5.3 Diagramming and Memoing

Diagramming and memoing accompanied the entire research process in this study and most notably during data collection, generation and analysis. Together these two methods made the analysis process tangible and brought to life the researcher's thinking and interpretation of the data. Diagramming can involve a range of strategies that enable conceptual mapping of the progressing analysis (Birks & Mills, 2015, p. 100). Stake (2006) suggests the use of diagrams—specifically matrices—to intersect, compare and collate developing codes and

themes within and across cases. Likewise, Miles et al. (2014) emphasise the use of matrices and networks where a series of nodes are linked with lines and arrows (p. 109)—a concept similar to concept mapping.

Diagramming

In this study, diagramming provided visual clarity in how concepts linked and processes occurred. Diagramming was particularly effective in refining the initial coding into broader categories, establishing links between data sets and the evolution of the final storyline and categories that reflected the data interpretation. In this way visualising the data as diagrams provided a mechanism to explain and convey the interpretation of the data (Miles et al., 2014). Diagramming took the form of matrices, concept maps and pictorial diagrams as sketches in an art pad, on a whiteboard and electronically in MS Word and MS Xcel. Matrices facilitated the clustering and collapsing of codes and categories to the final categories (Miles et al., 2014). Links to documentary evidence in the data could also be noted. Whiteboarding the developing categories together with codes on post-it notes was very useful in organising and refining the initial and intermediate coding of interview data into categories. Codes could be readily compared and moved between categories. This facilitated a more complete view of what was happening in the data, and was also a useful strategy to garner supervisor review and input on the analysis. Similarly, concept mapping proved useful in providing directional links in the data, prompting questions about the data and identifying gaps in the analysis. These diagrams and figures formulated the foundations for those presented in this thesis.

Memoing

Memos were recorded throughout this study. Frequently employed in grounded theory, memoing aids the reflexive process and is effective in capturing thoughts, decisions and reflections about the data (Birks & Mills, 2015; Miles et al., 2014; Saldana, 2013; Stake, 2006; Yin, 2014). Miles el al. (2014) emphasise that memos can be useful for extrapolating and synthesising ideas to formulate broader concepts and as such are ‘useful and powerful sense making tools’ (p. 96). Rolfe (2006), Creswell (2013) and Miles et al. (2014) emphasise the importance of memoing as a reflexive activity that leaves a detailed audit trail, which includes rationale for research decisions throughout the research process. The memos generated during this study reflected these outcomes. Being alone onsite, memoing during site visits gave the researcher the avenue to converse, question and reflect on and

record unfolding ideas about the cases. These memos served as an important source of data for analysis and findings (Birks & Mills, 2015; Miles et al., 2014). Memos, complemented by diagrams, helped to synthesise and understand concepts. These memos informed the coding of data, which sharpened the clarity and presentation of major categories (Birks & Mills, 2015). As recommended, continuous reflection and memo writing accompanied the analysis (Birks & Mills, 2015; Miles et al., 2014; Saldana, 2013). Comparing memos generated from the site visits, patterns and associations between data progressed the data interpretation to encompass broader concepts and categories.

4.5.4 Computer-assisted Data Management

Nvivo (version 11) data management software for Mac was used to facilitate data collection, management and analysis more effectively and efficiently (Bazeley & Jackson, 2013). As noted earlier, participant transcripts, key documents and typed memos were imported into Nvivo as key data sources for analysis. Nvivo was particularly beneficial for recording narratives, summaries and memos about the developing analysis. Having data in one place simplified the ability to triangulate sources and methods, continually code, compare and cross-reference data, particularly during the cross-case analysis.

4.6 Chapter Summary

This chapter explained the methods used in this collective instrumental case study for data generation, collection, analysis and interpretation. As discussed multiple qualitative methods were used to establish a comprehensive, contextualised understanding of NGRN practice readiness in Australian healthcare contexts. In the following five chapters, the findings are presented. Chapter 5 commences the findings from this collective case study research with an introduction to the four cases as the contextual background in which the key findings are situated. Chapter 6, 7, 8 and 9 present a detailed account of the major categories and subcategories that represent the key findings regarding NGRN practice readiness.

Chapter 5: Findings—The Four Cases

5.1 Introduction

This chapter begins the reporting of the findings from this collective instrumental case study. Findings are reported across five chapters. Stake (2005) explains that in a multiple case study such as this, while a researcher may want to report the findings from each case, this is often not possible as the story would be lengthy and 'exceeds anyone's knowing, anyone's telling' (p. 240). In a collective case study, Stake (2005) emphasises the need for a storyteller 'to winnow and consolidate' and focus on reporting the collective findings from the cross-case analysis (p. 240). This is the approach followed in this thesis. In this chapter, the four case study sites and the research participants are described. In the subsequent four chapters, the major categories that represent the key findings from this study are presented. The key findings from the cross-case analysis are reported in four major categories in Chapter 6, 7, 8 and 9. The four categories encapsulate the commonalities across the four cases, with the unique outcomes and differences for a particular case reported within the broader context of the category. Reporting in this way expands on the understanding of particular issues and provides for an in-depth, comprehensive understanding of HCPs' perception of NGRN practice readiness. This aligns with Stake's (2006) collective case study approach and makes for a manageable, holistic representation of findings.

5.2 Case Study Sites—Healthcare Providers (Institutions)

The aim of this study was to describe NGRN practice readiness from the perspective of Australian HCPs (individuals and institutions) and explain how a NGRN is determined to be practice ready. In achieving this aim, four different HCP institutions located in Queensland, Australia that met the inclusion criteria outlined in chapter 4 were selected as the cases for this study. Each case was classified as one of three ASCGA-RA classifications (ABS, 2014) (Table 12). The perceptions of HCPs (individuals) employed in these institutions from nursing, medicine, AH and HR were then explored. Despite similar frameworks regulating healthcare governance, professional practice and the educational preparation of NGRNs, HCP's perspectives in each case illustrated similarities and differences based on the geographic, service capacity and professional context of the HCP site.

Table 12: Case study sites

Case	Case 1	Case 2	Case 3	Case 4	Total sample
	Remote [R]	**Small outer regional [SOR]**	**Inner regional [IR]**	**Large outer regional [LOR]**	**4**
ASGC-RA classification	Remote [A+ 6]	Outer regional [A+ 4]	Inner regional [A+ 2]	Outer regional [A+ 3]	

All four HCP sites were public healthcare facilities, governed by a different QH HHS (QH, 2016a). Each HCP site employed the healthcare professionals described in Chapter 4 as relevant participants for the study. Services at each site included inpatient, outpatient, acute and community services. Variations were evident in service capacity and delivery with specialties and models of care determined by geographical location and consumer need. Each site had experienced periods of adjustment because of changes in state and federal government, a restructuring of QH, and service adjustment and expansion. At the time of this study, all HCP sites were experiencing infrastructure changes and workforce shortages in nursing, medicine and AH, with staff turnover being the highest, most significant operational cost.

Table 13 presents a comparative overview of the four HCP sites. The table captures the common and distinguishing features that set each case apart. Collectively these details accentuate variation across the cases and the contextual elements that can influence HCPs' (individuals) perspectives of NGRN practice readiness. The HHS context is included, as each site is a key service provider for their respective HHS. Particular points of difference to note are, first, the remoteness classifications, facility size and serviced areas, and distance to the nearest referral centre. These factors draw attention to the HCP's service capacity, reach and geographical context. Second, the differences in community profiles, particularly population size, ethnicity and social disadvantage, highlight the health needs and demand driving the delivery of the HCP. Finally, the staffing levels and profile of employees provide insight into the healthcare workforce including the NGRNs employed at the HCP site.

Table 13: Comparative view of the four case study sites

Item		CASE 1 [R]	CASE 2 [SOR]	CASE 3 [IR]	CASE 4 [LOR]
Classification	**ASGS-RA**	**ASGS-RA4 [R]** Remote [A+ 6]	**ASGS-RA3 [OR]** Outer Regional [A+ 4]	**ASGS-RA2 [IR]** Inner regional [A+ 2]	**ASGS-RA3 [OR]** Outer Regional [A+ 3]
	MMM	6	4	2	2
	RRMA	6 Remote Centre	5 other rural area	3 Large rural centre	2 Other metropolitan
	DWS	Yes	No	Yes	No
	SA	SA2	SA2	SA2	SA3
Hospital and Health Service [HHS] [1]		Health coverage 300,000 sq. km. Population of 33,000	Health coverage 141,000 sq. km. Population of 283,197	Health coverage 90,360 sq. km. Population 182, 049	Health coverage 148,210 sq. km Population 240,000 Catchment 650,000 over 750.000 sq.km
Median age[1]		30	41	35	32
Indigenous populations[1, 2] **Born overseas**[1, 2] **(% HHS population)**		23.1% 14.5%	9.2% 17%	4.7% 11.9%	7.1% population 12%
Categorised quintile 1: most disadvantaged socioeconomic group[1, 2] **(% HHS population)**		24.9%	32.3%	12.9%	18.9%
Major causes of death and illness[1, 2]		• Coronary heart disease (CHD), stroke • Chronic obstructive pulmonary disease • Cancer • Injury	• CHD, stroke • Cancer • Injury	• CHD, stroke • Cancer • Injury	• CHD, stroke • Cancer • Injury
Major risk factor for community [2]		• Risky Alcohol intake & obesity	• Obesity	• Risky Alcohol intake	• Obesity
Facility size [1, 3]		86 beds	< 57 Beds	180 -318 beds	606 overnight beds; 113 same-day beds,
Service Level/Category [3]		Main referral hospital	Largest referral centre in local community	Main referral hospital	Tertiary referral centre
Service overview [1, 3]		• Medical, surgical, endoscopy • Critical care • Paediatrics, Obstetrics • Mental health • Palliative Care, chemotherapy • Specialist outreach, telehealth	• Accident and emergency • Surgical and medical • Aged care • Low risk maternity services • Community, health screening, oral services	• Surgical and Medical • Critical care services • Obstetrics, Paediatrics • Mental Health • Aged Care • Specialist outpatient clinics	• Cardiac, neurosurgical, orthopedic, cancer, neonatal, anesthetic • Medical, surgical services • Critical care services • Paediatrics, obstetrics, gynecological, • Mental health • Specialist outpatient support services
Distance to referral/tertiary facility [1, 3]		Regional Tertiary referral: **904 km** Metropolitan Tertiary referral: 1823 km	Regional Tertiary referral: **98 km** Metropolitan Tertiary referral: 1778 km	Regional Tertiary referral: **386 km** Metropolitan Tertiary referral: 950 km	Metropolitan Tertiary referral: **1335 km**
Total Staff [1]		Not Available	Not Available	Approximately 1,865.01 [HHS]	Approximately 5,840 [HHS]
Nursing		186	162	628	2,068
Medical		46	21	184	601
Allied Health		30[1]	30 [4]	141[4]	429[4]
NGRN positions / year		13-20[1]	6[5]	40[5]	140[5]

[1] HHS Annual Reports for each site (2015)
[2] ABS (2016a); QH (2014b)
[3] QH (2015a, b, c); QH (2016a; 2016b
[4] DH AH at HCP site
[5] NGRN coordinator or educator for each HCP site

NGRNs were employed at each case study site in temporary positions on 12-month transition programs aimed at supporting their transition from student to RN. The numbers of NGRNs employed and program structure varied according to the site's size and capacity. Recruitment to these programs occurred through the QH graduate consortium, followed by a site-based interview process. Each HCP site, where feasible, hired one or two NGRNs on an ad hoc basis outside the consortium process and at different times of the year. NGRNs were rotated through different clinical settings. The rotation structure and sequence varied between sites, from one to four rotations across a 12-month period. Rotations included remote community, general and specialty settings. Dedicated nurse educators and clinical support were provided, although how these support processes functioned within each HCP site varied. Table 14 presents details on the NGRNs for each site and comments on key challenges and differences. Further details on the NGRN transition programs and support provided at each site are included in Appendix 6.

Table 14: NGRNs employed and transition program per site each site

Program elements	Case 1	Case 2	Case 3	Case 4
NGRN coordinator	NE	DON/FM; NE × 2	NM; NE; CNC	NE
Time of intake	February-March; July Unplanned: Intermittent across year	January, February Unplanned: Intermittent across year	February Staggered onboarding as required	February, March, April Unplanned: Intermittent across year
Numbers	<2015: 4–6 >2015: 13–20	4–6 (If positions available)	37–40	140
General comments	• ED rotation rated highly due to structured model of learning, new environment and overall experience • Remote and primary healthcare sites successful with educational and social support • Night Duty (ND): unit dependent	• Aligned to HHS policies for NGRN employment • Early introduction to DON - Interview; orientation • NGRNs encouraged to take annual leave between rotations to help adjust to lifestyle change • NGRNs engage in shift work including ND with dedicated preceptor	• Highly organised program • Personalised educational resources • NGRNs engage in shift work: ND determined by NUM • Educational support can be inconsistent (no designated person or support absent)	• 2011: 42% completion • 2016: 98% completion with program changes • NGRNs engage in shift work: ND determined by NUM • Workload demand can inhibit NGRN study day attendance • Socialisation issues o Handholding [varies] o Preparation and supernumerary time inconsistent o Silos—difficult to create cohesion o Need for exposure and experience

5.3 Participants—Healthcare Providers (Individuals)

Multiple HCPs (individuals) were recruited across the four cases. In total, 67 HCPs (individual) consented to participate in the study with 16–18 participants recruited per case. Participants were recruited from nursing, medicine, AH and HR. As expected nursing HCPs were the largest group to participate, with 43 participants (64%). Recruitment of HR professionals was unsuccessful for case 2 [SOR] and case 4 [LOR] and was limited to DHs in case 1 [R]. Similarly, recruitment of AH professionals across all sites was limited to one or two participants. From the total number of 67 participants, 54 were female (80%) with 13 males (20%). Table 15 presents a breakdown of participants recruited in each case. Further details about participant demographics can be found in Appendix 7.

Table 15: Participants per case study site

Participants		**Case 1 [R]**		**Case 2 [SOR]**		**Case 3 [IR]**		**Case 4 [LOR]**		**Collective case**
HCP	**DH**	**HCP**	**DH**	**HCP**	**DH**	**HCP**	**DH**	**HCP**	**DH**	**HCP + DH**
Nursing		7	1	10	1	9	1	13	1	**43 (64%)**
Medicine		3	1	2	1	1	1	1	1	**11 (16%)**
AH		1	1	1	1	2	1	0	1	**8 (12%)**
HR		1	1	0	0	2	1	0	0	**5 (8%)**
Total participants		**16**		**16**		**18**		**17**		**67**

Because of their position, the DHs could potentially be identifiable. Therefore, demographic data collected from DHs was specific to gender, position, department and profession only. The DHs in nursing and AH were female, with all four DHs in medicine being male. One female and two males held the HR DH positions. Demographic information about the 53 participants working closely with NGRNs identified that participants were aged 27–65 years, with an average age of approximately 43 years. The majority were female (85%), RNs (74%) and in practice for 18.5 years with an average of 13.7 years' experience with NGRNs. All participants from medicine were employed in senior positions: registrars, senior medical officers (SMOs) or medical directors.

The majority of all participants qualified in Queensland (80%) and held a bachelor degree or higher. From this group 23% held a master degree of which almost half (11%) were RNs from case 1, the remote [R] site. Case 2, the smaller outer regional [SOR] site had an older

age group and longer length of experience (25 years average) than the three other sites (16 years average). These SOR participants also had the most experience working with NGRNs (15 years) and this group consisted of the largest number of RN participants graduated with a general nursing certificate (hospital training program); all had gone on to qualify with a bachelor, graduate certificate or diploma qualification.

The majority of participants (71%) from the LOR site were employed in clinical settings identified as specialty areas (National Nursing & Nursing Education Taskforce, 2006), reflecting the larger number of specialty areas within the HCP site. Conversely, at the SOR site the majority (84%) of participants worked in general areas. Some of this is attributed to participants being employed in positions that worked across areas (e.g.: NEs or senior registrars), lower bed numbers and less demarcation between specialty and general areas compared with the other three HCP sites. The largest number of acting positions across all cases was in nursing (18%) with half of these (9%) being in nurse education.

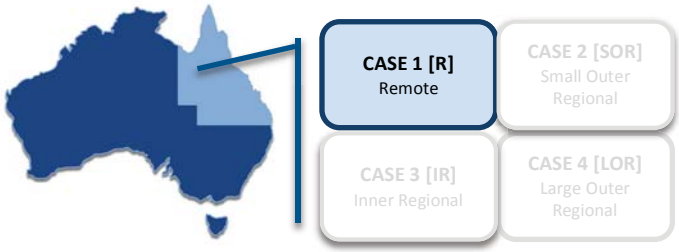
5.4 The Four Cases

This next section presents a detailed account of the four HCP sites selected as the cases for this study. Contextual elements that make each case distinct and that influenced the outcomes for each case are highlighted. The researcher's perceptions of the cases, as they were experienced during site visits, are included. These descriptions aim to familiarise the reader with the cases and provide the contextual background for the case study findings. Stake (2006) suggests that the collective case 'is understood differently and better because of the particular activity and contexts of each case' (p. 40). Describing the context of each case provides insight into the research participants, their reality and factors that may influence their perceptions of NGRN practice readiness. Further, providing this description enables the findings of the study to be understood and interpreted in the context in which they are generated (Stake 2006).

5.4.1 Case 1: Remote [R] Healthcare Provider

'Welcoming, close knit and focused on community diversity' [memo, 8 December 2015]

Figure 6: Case 1—Remote [R]



Case Overview

Case 1 was a remote [R] public HCP (institution) located within a medium-sized population centre (Statistical Area level 2 [SA2]) in Queensland (ABS, 2016a) (Figure 6). Covering 41,182 km^2, the HCP's local area was home to approximately 22,500 people of whom 15.1% were Aboriginal and Torres Strait Islanders (ABS, 2016a). Established in 1923, the area is a major industrial and commercial hub with mining, cattle and tourism being the dominant industry. Local retail and commercial services were minimal with only one to two major commercial and fast food outlets, several small specialty stores and fitness centres, and one public house. Retail trading occurred from Monday to Saturday and television and Internet signals could be intermittent.

In December 2015, this HCP employed approximately 190 nurses, 41 medical officers and 26 other health professionals, which included 22 AH positions (QH, 2015a). Primary, secondary and community health services were delivered from the HCP site. Onsite acute services included emergency and critical care, perioperative, medical, surgical, paediatrics, obstetrics, gynaecology, renal and cancer care (QG, 2015c). These services were spread across one main building. Selected outreach, community and HR services were located in adjoining buildings. Visiting specialist services were provided with a number of outreach services including AH, renal, aged and oral care (QG, 2015c). The HCP site experienced a constant flow of inpatients and outpatients. During the period October–December 2015, patient admissions registered 1,631 with 119 babies being born and 8,033 patient visits to outpatient services. National performance indicators for the emergency department (ED) were better than or within range of the latest national performance indicators; however, the

hospital's elective surgery performance indicators placed it in the poorest performing group of hospitals (QH, 2015a).

Redevelopment of the hospital had led to ward-based refurbishments and improvements specifically in emergency, outpatients, mental health (MH), cancer care and oral health services (QG, 2015c). As a result, the site was a contrasting mix of old and new infrastructure. Some areas, such as the perioperative area, were outdated and underequipped but overall the site presented as clean and functional. The HCP had undergone a successful accreditation process the week prior to the researcher's field visit. Posters displaying progress with the NSQHS standards (ACSQHC, 2012) were evident across the site and participants and staff proudly spoke of outcomes. Staff were well presented, relaxed and approachable, making interactions easy and comfortable. The general atmosphere was calm: no frantic pace was evident. The memo in Box 3 was written after a tour of the HCP site and captures the researcher's thoughts and feelings about the site.

Box 3: Researcher's memo

Facility tour [Memo, 8 December 2015]

The site is a stark mix of old and new. Areas that have been extended refurbished or new were very modern and fresh portraying a bright, professional environment. Older areas gave the sense of an aging hospital, a little dark or low in atmosphere but well kept, clean and tidy. The walk around the hospital reinforces the perception of adversity and the challenges faced by the organisation in managing day-to-day operations with a diverse, transient staff and client profile and operational and environmental difficulties. My host moved at a fast pace throughout the hospital between wards and units. I felt lost and had no idea of where I was—we seemed to move up and down stairs and in and out doors between locations—there was a flow but not a smooth, logical one. The staff were open and friendly and the atmosphere calm and organized in all areas we visited. An appearance of 'low activity' was prevalent but it was late afternoon. The physical environment was ordered, particularly the surgical ward. Hospital standards, photos of staff activities and occupational health and safety signage were very prominent. I was mindful that this presentation could have been reminiscent of the previous week's accreditation. My host acknowledged that this was the case in some of the areas noting that this was a positive outcome, highlighting that staff knew their quality standards and how they were demonstrated in their day to day activities. Appreciation comments of thankyous and acknowledgement of support and care from students, staff and clients and their families were also noticeable additions amongst the hospital signage.

Health Service Delivery

The HCP site is the main referral centre for the governing HHS. The HHS is responsible for providing healthcare to a catchment population of approximately 32,621 and covering a geographical area of 300,000 km^2 (QG, 2015c). In June 2015, the HHS employed 664 FTE staff (QH, 2015a): 58% clinical and 42% support staff. Acute, non-acute, primary and community healthcare was supported through the HCP site, three rural/remote hospitals, two multipurpose health services supporting residential and aged care, four primary and five community healthcare centres. Telehealth services were significant to health service delivery and were steadily increasing: between 2013 and 2014 these increased by 35% (QG, 2015c). The Royal Flying Doctor Service provided outreach clinics and other emergency care and the HHS employed the highest number of NPs in Queensland (QG, 2015c).

Healthcare Provider Clients - Demographic Profile

As a main referral centre for the HHS, the total population serviced by the HCP site was diverse and geographically dispersed, with vast distances separating communities and individuals. The surrounding region was dry and hot, serviced predominantly by air and road with some areas requiring four-wheel drive access. Demographic characteristics included a higher proportion of males characterised by fly-in-fly-out mining populations and a predominant young-to-middle-aged group with the average age being 31 years (QG, 2015c). A population decline of 1.3% was recorded in the region with the 2011 census (ABS, 2014). Socioeconomic disadvantage prevailed with 31.7% of the catchment population indicated to be socioeconomically disadvantaged with the highest rates reported for Aboriginal and Torres Strait Islander communities. A total of 23.1% of the HHS population were Aboriginal and Torres Strait Islanders and 14.4% were born overseas (Queensland Government Statisticians Office [QGSO], (2015a). Significant client demographics are summarised in Table 16.

Table 16: Case 1 significant demographics (QGSO, 2015a)

- High prevalence of socioeconomic disadvantage with the majority in the lowest quintile
- Male residents (11,730) outnumbered female (10,368) residents
- Younger population profile: Majority (74.9%) aged 15–64 years
- 6.8% aged ≥65 years and those <14 totalling 18.4% (ABS, 2016a)
- 8.4% born overseas with Oceania groups predominant
- Indigenous people made up 23.1% of the population with a median age of 21 years
- 28.3% of those employed worked in metal ore mining

Healthcare Provider Clients - Health Profile

The geographic remoteness exacerbated health issues, which was evident with higher rates of death by injury, particularly road trauma. The median age of death was 66 years, significantly lower than the Queensland average. The average age of death for non-Indigenous groups was 73 years and for Indigenous groups, 53 years—7 years lower than the Queensland average (QH, 2014b). The major causes of illness and death included cardiovascular disease (CVD), cancer and injury with a higher incidence of all illnesses than state and national averages. Aside from injury, coronary heart disease (CHD), chronic obstructive pulmonary disease, lung cancer and depression were significant health issues for the region. Risk factors included harmful alcohol intake, smoking, obesity and physical inactivity. Protective factors of immunisation were high at 93%; however breast screening rates were low (56%) (QH, 2014b).

New Graduate Registered Nurses

The HCP site traditionally employed four to six NGRNs annually in temporary full-time positions on a 12-month NGRN transition program of three rotations. In 2014–15, numbers increased and 13 NGRNs were employed, including three local residents. At the time of data collection (December 2015), the HCP site planned to increase NGRN employment numbers to 20 NGRNs for 2016. Details of the NGRN transition program are presented in Appendix 6. The program was generally seen as positive, and a good way to recruit new nurses to the area. An important element of the program was the dedicated educator position to support NGRNs; however, recruitment and staff shortages meant that for 2015, this position was often vacant, destabilising the level of support availed to NGRNs:

> *A definite positive for that would be our FYP [first year program] program and having a dedicated educator for them. Haven't done it as well this year because we've had about five, I think, in the space of a year, plus several times of vacancy. So, we feel terrible this year for our grads but they've coped, they're very adaptable, most of them; they coped … next year we're going to have a great program because we do have a permanent person … so that's great.* [C1: P4N]

Challenges for the Healthcare Provider

Challenges involved those commonly associated with delivering healthcare in remote locations. These include access to services and resources, ageing infrastructure and health workforce shortages. Cost pressures for the HHS governing the HCP site existed with the final total expenditure in 2014–15 showing an operational loss of $1.948 million (1.3% of total revenue). Factors contributing to this outcome included (QG, 2015c):

- supporting a large remote region and services, staff and patient travel, and minimum staffing models
- staffing and related costs, including contract employees, which account for 51.4% of total expenditure
- contracted nursing services, specialist recruitment and short-term medical specialist placements.

Funding, access and the remote classification underpin staffing issues, particularly for remote and specialty services (QG, 2015c; C1: P16HR). Nursing, medical and AH workforce challenges were commonly associated with attracting quality, experienced staff with the capability to mentor junior staff, and staff isolated outreach services. A low population density dispersed across the region resulted in minimum staffing models (QG, 2015c). These models compounded the difficulties associated with recruitment, where often staff had to work in isolation and consequently required a broad, high-level skills and knowledge set to provide adequate care. A need for accommodation and support further magnified the challenge of staffing these models.

A significant issue reported for the HCP site was the overtime, recruitment and turnover costs associated with the health workforce (QG, 2015c; C1: P16HR). High turnover and reliance on locum and agency (particularity in maternity care) had affected the continuity of care and caused financial burden. This issue was emphasised in conversations with DHs

from HR and nursing. HR identified that the longest length of service was generally 0–2 years, which aligned with the 2-year incentive package for the HCP site. The second largest was 2–4 years and third, 11 years.

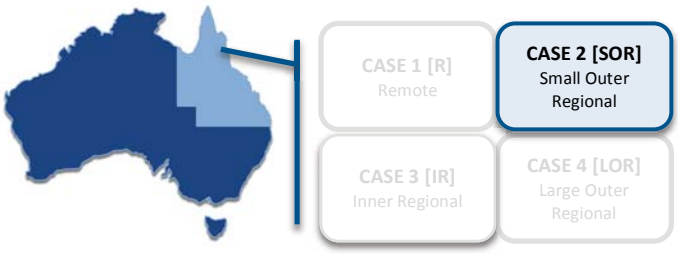
Aligned with national and state profiles the nursing and midwifery workforce within this HCP site was ageing. Projections of predicted retirement indicated shortages would occur over the next 10 years, exacerbating turnover issues (HWA, 2012a). Fluctuating staffing levels consistently occurred. Patient-to-nurse ratios were reported to vary between 1:4 and 1:10 depending on shifts, staffing availability and clinical setting. NEs and clinical facilitators supported education and student placements; however, this level of support was difficult to maintain because of staffing and financial constraints. Medical recruitment, retention and skills mix had also constrained service provision. Challenges centred on continuity of staffing and educational support. The staffing profile consisted of senior, resident and intern medical officers with vacancy rates as high as 75% at remote sites. A significant AH shortage also existed with this group being the most tenuous at the HCP site. Staff turnover and vacancy rates were significant, compounded by a need to provide cover for outreach services and interpersonal conflict within the department. The funding and efficacy of current models of care that integrated AH staff was seen as problematic. Similar to medicine, a void of senior staff in AH to mentor junior and new staff had resulted in low levels of expertise and staff being stretched beyond capacity [C1: P13AH].

A key aim for the HHS was to build a productive and sustainable health workforce through education. Within this remit was a strategic commitment to develop the Indigenous nursing and midwifery workforce and improve opportunities for graduate employment (QG, 2015c). Consequently, the HHS supported a range of generically focused education programs specifically for the health workforce. Education was supported through tertiary education providers, QH and local services located at the HCP site. Clinical placements in medicine, nursing and AH were provided onsite and in outlying services. Implementation of a rural medical generalist program and increasing predicted NGRN numbers, including local residents, reflected a ‘grow our own’ philosophy (QG, 2015c, p. 10). This philosophy was aimed at recruiting locally and building site-specific capability of the healthcare workforce to help resolve challenges with workforce turnover.

5.4.2 Case 2: Small Outer Regional [SOR] Healthcare Provider

'Classed as outer regional but the HCPs state, think and respond as though they are rural and remote; an old yet efficient, inviting and nurturing site' [memo, 26 February 2016]

Figure 7: Case 2—Small outer regional [SOR]



Case Overview

Case 2 was a SOR public HCP (institution) with 57 beds. Located within a medium-sized population centre (SA2) in Queensland (Figure 6), the local area covered 236.2 km^2 and had a diverse population of approximately 10,886 (ABS, 2016a). Established in 1885, the population centre is the central hub for the region, which was characterised by a number of small, geographically dispersed towns (Centre for the Government of Queensland [CGQ], 2015). Set against a tropical rainforest with unique wildlife, the region is known for its recreational diversity and attracted local and international visitors (CGQ, 2015; QH, 2017a). The town's dominant industry, agriculture, was reflected in the countryside: particularly fruit, dairy products and sugar cane. The town offered a range of services and access was predominantly via road and rail. Retail, education and healthcare were prominent industries and provided employment for the large majority of the population (ABS, 2016a). Local modes of transport included motor vehicle, bus and a taxi service (CGQ, 2015).

The HCP site is the major referral centre for the surrounding population, thus central to the delivery of health services. Facilities were distributed across one main building and a number of external stand-alone structures linked by internal and external pathways. Acute services offered included medical, surgical, operating theatre, accident and emergency, aged care, obstetrics and low-risk maternity services (QH, 2014a). Specialist services included oncology, diabetes, wound management, paediatrics and cardiac support, with AH and home and community care services (QG, 2015a). Visiting specialists supported anaesthetics, orthopaedics, paediatrics, MH, endocrinology and women's health services (QH, 2014a).

Telehealth was expanding and outreach health services were delivered through one community and four primary healthcare centres located in the region. The closest specialist referral hospital was located approximately 100 km away by road (QG, 2015a).

In January 2016, the HCP site employed approximately 159 nurses, 21 medical officers and 34 other health professionals, which included 15 AH staff across five professions (QH, 2016b). Between January and March 2016 patient admissions registered 1,531 with 47 babies being born and 2,117 patient visits to outpatient services (QH, 2016b). At this time, the HCP's performance was estimated as better than or within the range of all the latest national performance indicators with good levels of patient satisfaction (QH, 2016b). The 2014 *Small Hospitals Patient Experience Survey* rated the HCP between 81% and 98% on all categories (QH, 2016b). The hospital was the training ground for rural generalist doctors and supported student placements in nursing and AH (QG, 2015a).

On observation, the site looked old yet well maintained, clean and tidy. Resource constraints were evident: A3 and A4 laminated signs characterised the wall space and makeshift repairs on minor infrastructure were common. Processes to rebuild the HCP had commenced and while some infrastructure had been upgraded and/or replaced, the site appeared in need of further refurbishments. During the site visit, navigating the layout of buildings and connecting pathways was initially challenging (Box 4).

Box 4: Researcher's field note

Facility and site [Field note, 22 February 2016]

Building is tidy and clean but put together like 'pieces of Lego'. Some parts are new; some parts old—it is a mix of things with a contrast between old and new. The hospital is a rabbit warren: convoluted and unpredictable and covered in laminated A3 and A4 signs stuck on walls, noticeboards, corridors and stairwells. These cover everything from safety warnings to hospital directions and seem homemade. For me this reflects the constraints of budget and highlighted the 'band aid' effect to cope within limited resources.

Staff were relaxed yet professional, in uniform and very easy to engage and interact with. After the researcher had been orientated on the first day of the field visit, the staff were welcoming and supportive, with many staff willing to assist and provide time, resources and

help as needed. Overall, the hospital had a lot of movement and contrasting levels of activity was observed in patient areas (Box 5):

Box 5: Researcher's memo

Inside the wards [Memo, 22 February 2016]

I walked on to the surgical ward to a flurry of activity and an almost chaotic organization with people moving everywhere in both the corridor and rooms. I then walked onto the medical ward and not a person to be seen—seemingly empty and quiet. A striking and odd difference. The surgical NUM was moving and visible. The medical NUM was in her office behind two computers and a little hesitant with the interruption. Very different. I am told the surgical ward is a good place to work.

Health Service Delivery

The HCP was part of a HHS that governed health for approximately 283,197 people dispersed across 141,000 km^2 (QG, 2015a). The area was a popular tourist destination and growing commercial centre that was characterised by small and large townships and remote communities. An estimated 9% of the HHS client populations were Aboriginal and Torres Strait Islanders and tourism brought a highly transient population (QG, 2015a). In the HHS, healthcare was delivered through 10 hospital facilities, 10 primary healthcare centres, 6 community centres and a number of specialist outreach programs (QGSO, 2015b). Service provision was supported by private health facilities, which included a hospital and three nursing homes (QG, 2014a). The largest HCP was a specialist referral facility providing a comprehensive suite of healthcare services across the continuum of care. Health service redevelopment had resulted in a total bed capacity of 866 for the HHS (QG, 2015a).

Healthcare Provider Clients - Demographic Profile

The HCP served a culturally diverse population. Early Chinese and European immigrants, an Indigenous heritage and Australian and US service people influenced the population composition. Approximately 7.1% of the local HCP's population was Indigenous, with a median age of 18 years—just below the state average (ABS, 2016b). In contrast, the median age for the overall population was 42.5 years, representing an older-than-average state and national profile. In 2014, approximately 20.4% of the population were aged 65 years and over (ABS, 2016b). This group was a significant demographic for the region and reflective

of the number of long-term residents and an increasing retiree population settling in the area (ABS, 2015a; QH, 2004). Females (53%) just outnumbered males (47%) and a high socioeconomic disadvantage existed with 47.4% within the most disadvantaged socioeconomic quintile (ABS, 2015a). Key demographics are summarised in Table 17.

Table 17: Case 2 significant demographics (ABS, 2015a; QGSO, 2015b)

- Educated population: 51.8% possessed a diploma or bachelor degree
- Almost half the population (47.4%) fell within the most disadvantaged socioeconomic quintile with 18.4% rating in the low-income percentile
- 4.8% (491 persons) had a profound or severe disability requiring assistance
- 13.1% born overseas: a high proportion of these (7.7%) had poor English proficiency
- Transient tourist population with seasonal fluctuation in numbers
- 7.1% Indigenous with a median age of 18 years
- Older-than-average age profile: majority aged 25–44 years and 20.4% >65 years

Healthcare Provider Clients - Health Profile

Average age of death for this population was estimated as 77 years for non-Indigenous and 58 years for Indigenous people (QH, 2014b). Major causes of death and illness were CVD and cancer, followed by injury. For the HHS, 8/100 admissions were identified as preventable with 3/10 deaths avoidable (QH, 2014b). In the local township, the growing ageing population and increasing chronic illnesses were key issues. Obesity, smoking and risky levels of alcohol were the main risk factors, with smoking and alcohol consumption being higher than the state averages at 16% and 26% respectively (QH, 2014b). Risk factors for MH were also prevalent (QH, 2014b); however, immunisation rates (92%) and breast screening (62%) were the same or higher than national averages (QH, 2014b; QG, 2015a). Health issues were intensified by the degree of remoteness, socioeconomic disadvantage and proportion of Indigenous peoples (QG, 2014a; QGSO, 2015b).

New Graduate Registered Nurses

This HCP site had a 12-month NGRN transition program with intakes in February and July/August. Similar to other Queensland HHSs, the application process was through the QH graduate consortium (QH, 2013). Candidates were interviewed by the HCP and employed in 0.8 temporary part-time positions. The program (Appendix 6) commenced with

a 2-week orientation and included two clinical rotations: medical, surgical and their subspecialties. The program offered nurse education and preceptor support. Participants were positive and keen to have NGRNs, citing the need for their knowledge, enthusiasm and future workforce capacity and '*because we couldn't survive without them, and it's good to nurture your own*' [C2: P2N].

Challenges for the Healthcare Provider Site

DHs described an organisation that was cohesive yet constrained by staffing, budget and infrastructure limitations. As an acute regional facility, the HCP functioned under a rural generalist model and participants commonly referred to the site as having a 'rural or remote' classification. Many central management services operated from the HHS's major facility, located 100 km away, which meant significant travel for management that constantly took them offsite. The dual role of director of nursing and midwifery facility manager added responsibilities and divided attention between the roles, requiring a balance of time and resources and, to manage the facility, a different knowledge and skills set. The major costs for the HCP were employee expenses, primarily those associated with staff turnover, which totalled $5,434,938 in 2015 (QG, 2015a). Long and short-term contracts, substitute and casual staff characterised the employment profile. Attracting long-term health professionals with the right qualifications, particularly specialist medical staff and those for community centres, was difficult.

Challenges also related to facility management including building maintenance. Delays to the projected plan to build a new level 4 hospital meant major capital works on the current building had been required (QG, 2015a). Coupled with the HHS redevelopment, budget constraints and service disruptions had ensued. Telehealth was rapidly expanding, but older technological infrastructure and reduced space limited service delivery. The HCP had two local aged care services with 97 operational places, which also supported the wider HHS, thereby limiting local service (QG, 2014a; ABS, 2015a).

AH services were complex with a matrix of relationships and professions managed across a broad scope of locations. Represented by five AH professions, this group had input to service delivery across the care continuum. A total of 35/36 AH staff provided for the town and surrounding region with 15 located at the HCP site. The staffing profile was predominantly female with a high number of contracted, part-time job share positions. Job

share positions were mostly used to accommodate maternity leave and were generally effective. International recruitment was minimal (1) because of the lengthy recruitment process and professional regulation requirements. Skills mix was overall balanced; however an increase in clients experiencing chronic illness, particularly neurological disorders, had challenged the skills mix. The organisational structure gave a dual reporting process for AH: discipline and HHS. As a group they were detached from the executive levels of the HHS with the absence of an executive position within the HHS organisational structure. The DH stated that often this meant the '*allied health voice is not heard*' [C2: P15AH] in healthcare delivery, emphasising the importance of an AH presence on all HHS committees.

At the time of the site visit, medicine had experienced long-term stability in senior leadership. Challenges identified were focused on cost issues with staffing, predominantly the recruitment of SMOs for rural facilities and the retention of junior and international staff. Medical staff employed at the facility required a specific skill set of either obstetrics or anaesthetics (QG, 2015a) and junior medical staff needed to move on to progress in their training. Reliance on visiting medical officers and locum employees was disruptive and costly with fluctuating levels of commitment. For international staff, the cultural and community integration, while successful, was resource and time intensive for staff that eventually left. The casualisation of the two local general practice positions in the town had also created some 'discontinuity of care and skills mix concerns' [C2: P16M]. The constant orientation of casuals to local processes and models of care added to workloads of long-term staff, particularly senior medical officers (SMO).

The HCP's nursing workforce was also characterised by contract and casual staff and an older staffing profile due to retire. Being aware of the potential impact on future staffing had been a catalyst to employ and retain NGRNs. Casual staff were generally local regular nurses, who were more likely to accommodate the HCP's needs [C2: P14N]. Contract staff were often brought in to cover extended leave such as maternity leave. Limited numbers of international staff were recruited because of turnover rates, the time required to educate and limited resources.

NGRNs were seen as an integral part of the HCP's future workforce, particularly with predicted staff turnover of older nurses. Recruitment of NGRNs, however, was limited. The ability to employ NGRNs was dependent on available vacant positions, which were scarce. NGRNs also filled positions allocated for all levels of RN and as a result, managing skills

mix and providing adequate support to staff could be difficult. The establishment of standardised nurse-to-patient ratios (QH, 2016b), while providing significant benefits, would challenge the HCP to meet requirements. Further, the introduction of a new HHS procedure regarding the employment of NGRNs added expectations that were inconsistent with site-based needs and resources [C2: P14N]. Policy requirements requested that NGRNs be supernumerary in the first 2 weeks of orientation, with dedicated ongoing preceptor support for 6 weeks and no night duty in the first 3 months. With its existing staffing and skills mix, the HCP was unable to meet this requirement.

Strategies to support nursing staff and mitigate issues were evident. According to the nursing DH, a good broad skill set existed across the hospital and efforts were made to 'cycle nursing staff and move them around clinical areas to enhance their generic capability' [C2: P14N]. This provided more flexibility to address staffing and care needs. Staff, however, required the right capabilities to function in all areas, which meant significant investment in education, a cost the DON believed was warranted. The HCP had a skill centre and drew on the HHS for support. Education was promoted and included activities in interprofessional practice.

Interactions observed and general comments from staff gave the impression of unity among all health professionals. The cycling of staff across departments had meant staff and skills were well known to one another and teamwork was easier. This was also reflected in interviews with nursing staff and comments about the HCP and expectations of NGRNs:

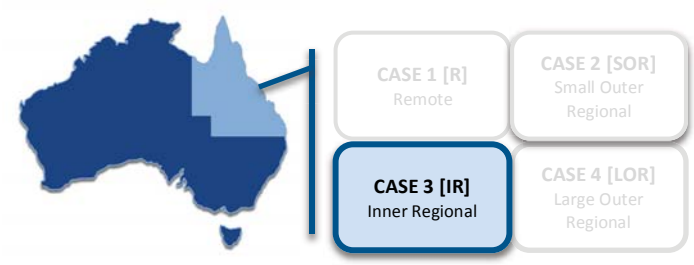
> *when that MET [medical emergency team] call goes, we don't have a MET team, so everybody—one person from every ward, usually who's closest to the door, goes to that MET call. So that might be the grad nurse* [C2: P2N].

The leadership team spoke highly and respectfully of each other with comments such as being 'excellent to work with'; 'an exceptional leader'; 'very good leadership' and support and 'highly regarded by everyone'. The SMO stated they had 'collaborative, cohesive teams' [C2: P16]. When asked, all DHs believed that while 'pockets of negativity exist' [C2: P14N], overall the workplace culture was positive. This was reflected in my interactions with staff within the facility. The overall impression and observation of the HCP site gave the sense of a cohesive and supportive team led by a respectful, collaborative leadership team.

5.4.3 Case 3: Inner Regional [IR] Healthcare Provider

'New, spacious and expanding (HCP site); the local area feels clean and green, fresh and open with carpets of cane set against palm trees and blue sky' [memo, 2 March 2016]

Figure 8: Case 3—Inner regional [IR]



Case Overview

Case 3 was an IR public HCP located in an area that covered 7,601.2 km^2 (QGSO, 2016). The region is a major coastal and commercial hub in Queensland (Figure 6) and home to an estimated population of 123,724 (AGDOH, 2015). A tropical climate, national parks, beaches and islands characterised the landscape, making it a popular tourist destination (QH, 2017b). Established in the early 1870s, the town expanded on the growth of the sugar industry. Four major industries dominated the region: mining, sugar, farming and tourism (ABS, 2015b). The region's urban centres and localities provided for a range of goods and services, with health, education and retail most prominent. Access was via road, rail, bus and boat with the private motor vehicle being the main source of transport (ABS, 2016a).

The HCP is the major referral centre for the governing HHS. Redevelopment between 2014 and 2017 expanded health services and almost doubled the HCP's bed capacity from 163 to 318 beds (QH, 2015d). Health services offered were across the continuum of care including inpatient, outpatient and ambulatory services, specialist care, rural, remote and outreach services for which telehealth had increased by 53%. Specialist referral hospitals were located 386 km and 950 km away by road.

At the end of January 2016, the HCP employed approximately 666 nurses, 194 medical officers and 153 other health professionals, including an estimated 85 AH professionals (QH, 2015b). The HCP's activity was constant and growing. During the period January–March 2016, patient admissions registered 9,037 with 402 babies being born and 30,477

outpatient visits. Overall performance was better or within the range of the latest national performance for the ED; however, elective surgery performance indicators were in the poorest performing group (QH, 2015b).

The HCP site presented as new, clean and fresh; a modern building constructed to reflect the local environment and provide optimal functionality. The main services were located in one main building and most adjoining buildings were linked and locked with pass card access. The internal configuration of the site was simple, spacious and uncluttered with wide corridors filled with natural light. Patient care areas were contemporary: colour coded with clear signage and protected outdoor areas for patient use. Consideration for collaborative healthcare was obvious, with open office space shared by healthcare and administration personnel, central workstations and meeting areas, and a staff recreational environment. The staff were polite and courteous but constantly moving where a sense of 'business' prevailed. Design issues highlighted by staff included small medication rooms and workspaces and limited computer access in some units, leading to challenges with workflow that sometimes affected workloads where staff competed for workspaces [C3: P3N]. Overall, the environment was appealing and the layout made movement around the building fluid and easy. Box 6 presents a field note made about the environment:

Box 6: Researcher's field note

Facility and site [Field note, 4 March 2016]

The hospital is fresh and open—a new design built on European concepts where natural light is a highlight. The inside seems as large as the outside! The newness of the building made a comparable difference to how staff functioned and whilst not perfect in model—efficient and productive in enabling a better flow of care and movement through the hospital. Swipe card entry is installed for access. The interior while at times stark is simple, uncluttered and open—engendering a clean and light feeling as you move through the building. Consistency in colour and design is noticeable and stood out. The wards were tidy, walls displayed well-made, necessary clinical information and easy to follow signage, which was professional and simple. Finding my way around was easy and complemented with very receptive and helpful staff. Car parking was plentiful and easy to access. I felt good being in the building and onsite.

Health Service Delivery

The HCP was part of a HHS that delivered healthcare across 90,360 km^2 to a catchment population of approximately 182,049, including island communities (QG, 2015b). The HHS employed approximately 1,300 health professionals and provided a suite of healthcare services through seven hospitals, eight community and primary healthcare centres and two multipurpose residential aged care facilities (QG, 2015b). The HHS provided acute and non-acute, community and primary healthcare and had over 333 beds and bed alternatives and 29 aged care beds. Community-based services focused on Aboriginal and Torres Strait Islander populations, aged care, MH, oral and women's health and alcohol and other drugs. The HHS was highly self-sufficient with the majority of its residents being treated locally (QG, 2015b).

Healthcare Provider Clients - Demographic Profile

The HCP serviced a large and diverse region, comprising 17 medium-sized population centres (SA2s) (QGSO, 2016). An estimated 123,724 people resided in the region and the HCP's local population totalled 6,507. The population is culturally diverse with 4.4% being Indigenous and 11.7% born overseas. The mining and tourism industry brought a fluctuating transient population adding further diversity. The median age of the population was 35.7 years, falling just under the national average. For the Indigenous population, however, the median age was 23 years (QGSO, 2016). The median age of death also varied with Indigenous being 63 years and non-Indigenous, 78 years (QH, 2014b). Around 46.6% had a Year 11 or 12 qualification and 51.5%, a non-school qualification. Unemployment was problematic with a March 2016 unemployment rate of 7.7% (QGSO, 2016).

Socioeconomic disadvantage was evident in the region with 11.3% in the most disadvantaged percentile (QGSO, 2016). The highest prevalence of socioeconomic disadvantage was among Indigenous Australians and locations outside the cities. For those in very remote regions one in two persons experienced socioeconomic disadvantage (55%). These factors are known to exacerbate health issues and have the most significant impact on poor health outcomes (QGSO, 2016). Significant demographics are presented in Table 18.

Table 18: Case 3 significant demographics (ABS, 2015b; QGSO, 2016)

- Compared with greater Queensland, this region had:
  - Higher proportion of adults aged 25–64 years (55.4%)
  - Higher proportion of Indigenous people (4.4%)
  - Highest rate of homelessness (351.6 per 10,000 persons)
- Growing ageing population: 20.4% are 65 years and over, above state average of 14.7%
- Cultural diversity: 11.7% born overseas and 4.4% identified as Indigenous Australians
- High unemployment: 7.7% for the HHS and up to 17.9% in local SA2s
- Socioeconomic disadvantage: 11.3% in the most disadvantaged profile

Healthcare Provider Clients - Health Profile

The prominence of risk factors higher than the state's averages underpinned health issues for the population. Major causes of death were identified as CVD followed by cancer and injury. The prevalence of CVD was the highest in Queensland (QH, 2014b). Health issues causing the greatest burden of disease included chronic heart disease, stroke, depression, lung cancer, dementia, diabetes, colorectal cancer, asthma and osteoarthritis, with other significance causes of illness and death being MH and suicide (QH, 2014b). The predicted growth in the age of the population would compound these issues, adding greater complexity and demand for healthcare services. Critical risk factors were the growing rates of obesity (26%), risky alcohol intake (28%) and smoking (18%), particularly in young people. Prevalence of these risk factors as 15–30% higher than in the rest of Queensland, although rates of immunisation (93%) and breast screening (62%) were higher, with the latter one of the highest for the state (QH, 2014b).

New Graduate Registered Nurses

This HCP site employed 37–40 NGRNs on a 12-month graduate transition program. Over the 2 years preceding the study, numbers had increased from 29 to 37, reflective of the HCP's commitment to 'growing their own' in addition to the expansion of the HHS and HCP site. The NGRN program (Appendix 6) was coordinated by a NE and aimed at consolidating knowledge and skills, facilitating socialisation and developing clinical competence and confidence. The HHS had a dedicated webpage that explained the NGRN program and provided links to the specific placement areas. Application for the program was

via the QH graduate consortium portal and included permanent full and part-time positions. The HCP also offered temporary contracts if permanent nursing vacancies did not exist.

NGRNs had the opportunity to rotate to a range of general and specialist settings, including rural sites, and were supported in practice predominantly by preceptors. NEs were employed within the HCP's education and research department; clinical coaches and support nurses were ward based. Role blurring was identified as problematic where clinical coaches were often called upon to take on NUM and CNC roles, leaving nursing staff to support NGRNs. An important part of the program was the program portfolio and performance review system. These elements were 'individualised to each NGRN as a way of welcoming the graduate, valuing their presence and create a sense of belonging' [C3: P3N]. The portfolio encouraged a self-directed approach to professional development and a record of their professional practice.

Challenges for the Healthcare Provider

During March 2015–March 2016, case 3 experienced substantial change, a remark echoed by all participants. A 100% patient occupancy rate over a prolonged period, coupled with staffing issues, had influenced the workplace culture and staff retention. According to HR, staff and patient complaints had increased. The HCP 2015 staff opinion survey had identified dissatisfaction with the executive; in particular, a lack of transparency with recruitment processes and cynicism around decision making [C3: P18HR]. Bullying and harassment within the workplace was identified as prevalent and a priority [C3: P18HR]. A staff survey was conducted to identify the key issues and informed the development of education and support measures that led to improvements.

Overall, comments about the facility at the time of data collection (March 2016) were positive and the HHS board that governed the service was described as '*collaborative, firm, and fair*' and the CEO was '*well regarded'* [C3: P18HR]. The most positive and significant changes included a new executive leadership team, organisational structure and facility. Improvements in staff turnover and workplace culture were also highlighted. According to the DHs, executive changes resulted in positive outcomes. Change in the HR leadership was said to have transitioned the HR team from being '*an unproductive, negative culture of 60% staffing vacancy to a fully staffed, collaborative team'* [C3: P18HR]. The HR DH was personable, positive and people focused; motivated to improve workplace relations and

outcomes. This was reflected in positive engaging interactions and comments made by other HR participants during the researcher's site visit.

AH was in the process of leadership transition and organisational restructure. Similar to other HCPs, AH was large, complex and diversified across divisions and locations. Loss of the HHS executive position was described as *'disappointing'* [C3: P16AH] and again, similar to other sites, raised concerns about potential under representation at the executive level. Challenges in management, staffing and reporting processes had been experienced. Restructure to the current service model had generated some discomfort, particularly where work patterns had been altered [C3: P10AH]. The change, however, was welcomed and a positive long-term outlook was evident in comments [C3: P10AH].

A welcomed outcome of organisational restructure for nursing was regaining full governance and operational accountability including nursing recruitment, which previously fell within HR's portfolio [C3: P15N]. Governance of medicine had also changed. In the previous structure, the medical executive director managed medical administration and research. Growth in demand and size of these portfolios had led to the creation of two distinct roles, enabling for a more efficient focus and management for each [C3: P17M].

The HCP was described as *'well-funded'* [C3: P15N], reflected in the HCP having achieved a financial surplus of $12.67 million for the year ending 30 June 2015 (QG, 2015b). The most significant costs related to recruitment and retention of staff. While the HHS was moving forward and experiencing growth, medicine and nursing were struggling to keep up. Medicine was currently understaffed and some frustration was voiced with systems and recruitment where *'employment and turnover of intern staff'* was highlighted as *'problematic'* [C3: P17M]. Attempts to retain interns for specialist positions against the profile of larger metropolitan facilities had been largely unsuccessful. The outcome resulted in vacant resident or registrar positions and *'a lack of supervision for junior staff'* [CP3: P17M] that undermined the quality of education. A number of medical staff were described as international recruits with medicine having the highest number of non-English speaking background (NESB) staff on profile. Challenges with capability and skills mix had been time intensive to address. Medical officers were also more likely to be temporary or casual employees with only 62.87 permanent, compared with 132.70 in temporary and 60.08 in casual positions (QG, 2015b).

Conversely, in nursing, 624.40 were permanent, 685.30 temporary and 19.15 casual. The nursing profile was described as predominantly novice with a high number of junior staff. Turnover timeframe was generally 3–5 years with high attrition rates in 2015–16 leading to increased employment of agency staff. Attracting and retaining staff, in particular specialist healthcare practitioners, had been challenging with MH staffing levels noted as a focus of concern. All healthcare professional groups identified aged care as a dominant characteristic of clients and highest percentage of clients, particularly the '*hidden geriatrics that present amongst the regular patients'* [C3: P17M]. Similarly, a rise in MH presentations and paediatrics was identified. A concern raised in relation to all three client types was the recruitment of staff with the expertise to provide care for these client groups.

Approaches to improve recruitment and retention included enhanced marketing of the HCP and targeting of the local area to attract staff. Strategies included a fast track program for recruitment, and redeveloping the website and job portal. In addition, to help manage the high number of part-time employees, a 'part time preferred' model had been adopted (QG, 2015b). Traditionally the HCP had been focused on developing the technical capability of health graduates; however, following recent workplace culture issues, the focus had shifted to building leadership and management capacity [C3: P18HR]. Growing the leadership capabilities of staff, particularly nurses and midwives, was seen as a way to improve staff retention and ensure staff moved to positions of leadership and had leadership training and development.

Being a new facility, the technology had rapidly expanded. Telehealth services had increased by 53% and continued to grow. Within 3 months of the researcher's site visit the HCP would change to being a digital facility. Conflicting reports about this change suggested the site was '*well prepared and positive'* [C3: P15N]. Others highlighted '*limited access to bedside equipment could lead to workflow issues*' [C3: P4N] and that the design could compromise patient care as highlighted in the following quote:

> *I'm really distressed by our new building because we used to in the old days, you'd walk past the room and you can't help yourself, you'd look in because you can scan the room and look at everybody, you can see them, whereas now you walk past a room, you've got to go around the corner to see the patient.* [C3: P4N]

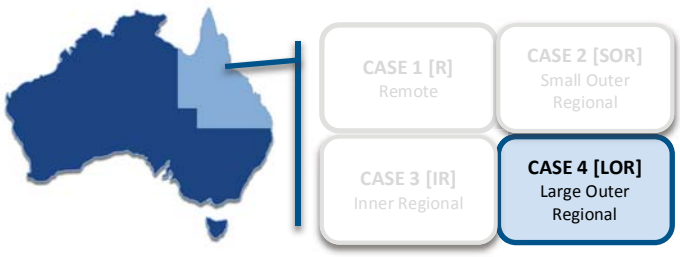
Older participants cited challenges in adapting and incorporating technology into practice. Challenges included a need to address staff attitudes and capability. A new learning management system (LMS) for staff education was being implemented and comments suggested that the LMS would improve staff capability and help mitigate issues in using digital technology for patient care [C3: P4N].

Overall, despite challenges, there was a positive commitment at the site to progressing forward. A genuine interest in the staff was a common thread in conversations, particularly with the leadership team in areas of support, function and capacity. DHs seemed to be people focused and keen on building a positive and productive workforce. The change in leadership was welcomed, relationships were more collaborative and while some pockets of negativity persisted, overall the workplace culture was described as positive. From an HR perspective *'practical back to basics strategies and focusing on the capacity of the people'* [C3: P18HR] was a way to provide high-quality care and have an efficient healthcare service. This gave the impression that the HR of the HCP were a priority.

5.4.4 Case 4: Large Outer Regional [LOR] Healthcare Provider

'Outer regional perceived as inner regional and functioning as a metropolitan hub: old, large, new and continually expanding' [Memo, 4 June 2016]

Figure 9: Case 4—Large outer regional [LOR]



Case Overview

Case 4 was a LOR, tertiary level public HCP. The HCP has approximately 700 beds with a total budget of 750 million and provided health coverage to over 750,000 people in a catchment area of 750,00 km^2 (QG, 2015d). Located within one of Australia's largest tropical cities (Figure 6), the surrounding population was diverse and in excess of 192,038 (ABS, 2016c). The local government area covered 3,736 km^2 or approximately 0.2% of the

total area of Queensland. Initially developed as a major port and pastoral run in the 1880s, it grew to become a key industrial hub and a major military base from the mid-1960s. A year-round tropical climate, beaches, bushland, reef and military installation characterised the region.

Significant industries providing employment included health, education, government administration, retail and defence. Agriculture and fishing, followed by construction, mining, manufacturing and business services were also prominent (ABS, 2016d). The city is popular for tourists and has an army base; the population is transient with a high turnover. Access to the region was plentiful with major highways, bus, rail, ferry and a domestic and international airport.

The HCP is considered one of the largest non-metropolitan HCPs in Australia and the major tertiary and specialist referral service for regional Queensland (QG, 2015e). The closest tertiary referral hospital was situated 1,375 km away by road with regional facilities located approximately 347 km and 950 km away. In January 2016, the HCP employed approximately 3,135 staff: 2,043 nurses, 646 medical officers and 446 other health professionals, which included 15 AH professions (QH, 2015c). Part-time work was popular, particularly in nursing, with 55% of the workforce working part time.

The HCP and affiliated services were expanding rapidly. The current bed capacity for the HCP was approximately 624 with the proposed number of beds increasing to 697 by 2017 (QH, 2015c). The HCP delivered a comprehensive suite of services in all major specialties including cardiac, neurosurgical, orthopaedic, cancer care, neonatal, surgical, medical, emergency, critical care services, obstetrics and maternity care, paediatrics, MH and a range of specialist outpatient and clinical support services (QH, 2015c). The HCP served as a central teaching provider for three universities and a number of colleges (QH, 2015c). The size and capacity of the facility was reflected in its overall activity patterns. During the period January–March 2016 patient admissions (overnight, same day and emergency) registered 17,122 with 655 babies being born and 54,794 patient visits to outpatient services. For the same 3-month period, emergency admissions reached 6,986 and performance figures for the ED were better or within range of the latest national performance indicators. Elective surgery registered within the poorest performing group (QH, 2015c).

Health Service Delivery

The HHS governing the HCP covered an area of 148,210 km^2, or 8.5% of Queensland. The HHS bordered four other HHSs and provided healthcare for a population of 239,298. The HHS also supported a catchment population of approximately 650,000 (QG, 2015e). Because of ongoing, widespread redevelopment, the HCP had expanded the range and capacity of services offered. Healthcare services for the region were delivered through the HCP's seven rural health facilities: two-aged care facilities and five community and primary healthcare centres (QG, 2015e). The HHS employed approximately 5,433 health professionals with 30% situated in rural and community settings (QG, 2014b). Approximately 12% of the staff were from NESB and 35% were Aboriginal and Torres Strait Islanders. The HCP plays a central role in supporting outpatient, outreach and AH services for specialty areas including the satellite renal units and telehealth models of care, which had experienced a 57% increase in consultations between 2013 and 2014 (QG, 2014b).

Healthcare Provider Clients - Demographic Profile

The total population of the city and surrounds was approximately 239,298. The largest percentage (95.0%) resided in outer regional locations and the remaining 5% in remote and very remote locations (QGSO, 2015c). The estimated resident population of the local city was 192,038 with 6.1% or 10,703 residents being Indigenous Australians (ABS, 2016c). The median age for the overall population was 33.3 years: younger than state and national profiles (ABS, 2016d). The largest population group was those aged 25–64. Those 65 years and over represented 10.6% of the population and were predicted to have the highest growth over the following 10 years (ABS, 2016d; QGSO, 2015c). These older groups represented a key demographic for healthcare services, which was reflected in an increase in admissions for chronic illness and the 4.3% of the population that had a profound or severe disability requiring assistance (QG, 2015c). While the population was culturally diverse, only 19.9% of the population was born overseas (QGSO, 2015c). Socioeconomic disadvantage was highly prevalent with 29.4% in the second lowest quintile. Just over half (51.8%) of the population had Year 11 or 12 as their highest level of schooling. Significant demographics are listed in Table 19.

Table 19: Case 4 significant demographics (ABS, 2016d; QGSO, 2015c, d)

- ASGS classification as outer regional
- Younger population profile: median age of 33.3 years, below state average: 36.8 years
- 80.1% of people born in Australia, with only 19.9% born overseas
- Socioeconomic disadvantage prevalent with 18.9% in the most disadvantaged profile
- Indigenous Australians made up 6.1% of the population
- High unemployment rate at 8.6% compared with Queensland state average of 6.5%

Healthcare Provider Clients - Health Profile

Health outcomes were diverse and influenced by locality, varied health determinants and socioeconomic disadvantage. Risk factors included obesity (29%), smoking (15%) and alcohol (23%). Positive outcomes were evident with immunisation and breast screening rates being 93% and 66% respectively: higher than the state averages (QH, 2014b). The major burden of disease was cancer, CHD, stroke and injury. The leading causes of death were CVD and cancer followed by injury where percentage ratings were higher than state and national averages (QH, 2014b). The median age of death was 56 years for Indigenous and 75 for non-Indigenous populations. Challenges for the HHS included a greater demand for a growing, ageing population and diverse healthcare needs coupled with an ageing, changing generation of HCPs (individuals) (QG, 2015d).

New Graduate Registered Nurses

The HCP managed the HHS's 12-month NGRN transition program. The program employed approximately 140 NGRNs in 0.74 temporary part-time positions. Intakes occurred in February, March and April through the QH graduate consortium portal, with intermittent recruitment throughout the year. Supported rotations were provided across the HCP and affiliated service groups including specialty areas and rural facilities (QG, 2015e). Commencing with a 2-week orientation, the program included structured study days and regular debriefing sessions (QH, 2016c). Details of the NGRN transition program are presented in Appendix 6. In 2017, the program was set to undergo a restructure in rotations moving to a 6-month rotation schedule supported by a clinical coaching model [C4: P8N]. Clinical coaches would work with all RNs to support and encourage their support NGRNs [C4: P8N]. This planned change was seen by some as 'concerning' while others were open

to the prospect of ‘enhancing the professional teaching role encompassed as part of the RN practice standards’ [C4: P8N]. The HHS HR department was responsible for learning and development initiatives including the NGRN program. HR staff met with NGRNs on career days, during recruitment and during their onboarding process.

Challenges for the Healthcare Provider

Over the preceding 5 years this HCP had experienced rapid and constant expansion. Consequently, change was a ubiquitous feature and reflected in participant comments. Similar to case 3 were issues stemming from service expansion and organisational restructure, providing another example of the impact these factors have on service delivery. Redevelopment was due for completion in 2017 and strategic plans indicated further expansion (QG, 2015e). The rapid growth was a significant opportunity for healthcare in the region; however the change and adjustments had been problematic for the HHS workforce. Organisational changes in management and operationalisation of service delivery had prompted shifts in systems, processes and staffing in all disciplines. Similarly, infrastructure changes had disrupted service delivery, creating some frustration. Moving around the site gave the sense that things did not yet fit together logically or ‘gel’ effectively or efficiently. Workplace culture was described as both positive and negative, which aligned with comments about change, demand and the expansion of healthcare delivery.

Funding and cost issues were related to service expansion, employment and retention of staff. However comments from the executive indicate the HCP was ‘*adequately resourced financially, but human resources are problematic’* [C4: P17N]. A growth in the service had to lead to a shortfall in staffing and performance, and subsequently increased workload and pressure on staff. Meeting national targets and consumer demand within such constraints added to the pressure. One participant described the business and pressure within healthcare environments and how this had spread to become a normal part of the complexity experienced within the HCP’s environment:

> *it’s become a very high-pressured environment. Now, people will say that healthcare was always high pressured, but in the … the screws have been turned even harder. What might’ve been a busy intensive care unit, that busyness now goes out to all our wards. There’s such high turnover of patients. The patients that come through are sicker. They’re more complex than they were. People are living longer, they’ve got*

> *more illnesses, they present with more comorbidities, and the pressure's on. From the moment they're admitted, their journey's tracked until they're ready for discharge. That whole process is pressured.* [C4: P14 M]

The size of the service drew comparisons with metropolitan services: '*the only difference between us and a metropolitan service is geography*' [C4: P17N]. The geography, in turn, brought challenges in service delivery, primarily in staffing and access. A number of 'staffing holes' existed in rural and regional locations linked to the HCP [C4: P17N]. Given the size of the HCP, staffing numbers in addition to the skills mix compounded the issues.

The size of the service had brought challenges for AH. While comprehensive and positioned in all areas of service provision, new service and staffing models had created adjustments in staffing levels. Again, the loss of the executive director position in 2009 meant that maintaining an AH presence at a senior level was difficult [C4: P15AH]. The AH profile appeared limited for a large service and addressing challenges was said to be frustrating at times because of bureaucracies and difficulty managing the governance of individual professions [C4: P15AH].

For nursing the current retention benchmark was stated as 3 years and described as *'positive if staff member remains for 3 years'* [C4: P17N]. With this, a large cohort of the HCP's nursing staff was due to retire. Parallel with service expansion in specialty areas and staff turnover, the need for specialist nurses was considered a priority: *'in five years' time, we will be needing specialist nurses'* [C4: P17N]. According to the DH, specialist service provision would be the *'greatest challenge in the next 5 years'* and *'will likely to worsen before it improves'* [C4: P17N]. Emphasis on specialist services to cope with demand was in areas of paediatrics, midwifery and oncology services. Part time and job share positions were prominent and encouraged as a way to instil work–life balance and potentially a happier workforce. Further, with a large group of staff due to retire, part-time employment facilitated a smoother transition to retirement. Despite the challenges this HCP had been experiencing, participants portrayed a sense of resilience with an optimistic outlook for future changes.

5.5 Collective Case Study - Key Findings

In the preceding section the background and context of the four cases was described and comparable features of each case discussed. This draws attention to the commonalities and

particularities within each case that emphasise the differences between them. More specifically, differences can be seen in the size and profile of the communities serviced by each HCP site; the influence of the geographic location and facility size on the variability, availability and access to healthcare services; and the extent and retention of the healthcare workforce. Given these factors, the number of NGRNs employed within each HCP site was diverse and the variations would likely shape their first year of practice experiences.

Knowledge of the background and central features of each case is important for two reasons. First, this knowledge creates a framework for the reader to maintain a link to each of the cases when reading about the key findings. Second, the information contextualises the key findings, which aims to facilitate deeper understanding and meaning of the outcomes. As discussed in Chapter 1 and 2, when exploring complex phenomena in the real world of practice, understanding the context in which it emerges helps to provide the in-depth detail required to fully understand the features that create a phenomenon.

In the next four chapters, the key findings of the study are presented. As discussed in chapter 4, the key findings were generated from the cross-case analysis, where the findings from each case were analysed across cases and interpreted against the research aim and questions (Stake, 2006). The cross–case analysis resulted in four major categories and subcategories as listed in Table 20.

Table 20: Major categories and subcategories with corresponding thesis chapters

Chapter	Major Category	Subcategory
6	Dominance of context	• *Healthcare system and environment* • *People and the quality of workplace interactions*
7	Defining practice readiness	• *Multidimensional readiness* • *Confidence underpins performance*
8	Determining practice readiness	• *The assessment continuum* • *Dominance of context*
9	Developing practice readiness	• *Transition continuum* • *Right environment to flourish*

Each of the subsequent chapters reports on a major category. Chapter 6 presents ***Category 1: Dominance of context*** and describes how the characteristics of the healthcare context influenced HCP professionals' perceptions and decisions about NGRN practice readiness. Chapter 7 reports on **Category 2: *Determining practice readiness*** and describes how HCPs in this study determined a NGRN's practice readiness. The assessment process and key influences are explained and completed with a description of the assessment outcomes. Chapter 8 reports on **Category 3: *Defining practice readiness*** and is dedicated to discussing how HCPs define NGRNs' practice readiness and the key characteristics that HCPs align with being practice ready. Finally, Chapter 9 examines **Category 4: *Developing practice readiness*** and describes findings related to the factors that develop and enhance a NGRN's practice readiness and enable NGRNs to thrive and evolve in their new RN role.

5.6 Chapter Summary

This chapter has provided a description of the four cases within this collective instrumental case study and their context. Key features of each case were discussed with a focus on the geographic location and healthcare services, community and healthcare workforce profiles, and the internal and external factors influencing healthcare delivery for each HCP. The following chapter describes how HCPs in this study determined NGRN practice readiness. The assessment process and factors influencing this process are explained and completed with description of the assessment outcomes.

Chapter 6: Dominance of Context

6.1 Introduction

In Chapter 5, the four individual cases in this collective instrumental case study were introduced to explain the context in which the perceptions of practice readiness in this study were explored and interpreted. The next four chapters: Chapter 6, 7, 8, and 9, are dedicated to discussing the key findings of the study as outlined in Table 21. This chapter presents **Category 1: *Dominance of context,*** which describes how characteristics of the healthcare context influence HCP's perceptions and decisions about NGRN practice readiness. Throughout the chapter, the most illustrative participant quotes are used to reinforce the points being made.

Table 21: Major categories and subcategories—Dominance of context

Major category	Subcategory
Dominance of context	• *Healthcare system and environment* • *People and the quality of workplace interactions*
Defining practice readiness	• *Multidimensional readiness* • *Confidence underpins performance*
Determining practice readiness	• *The assessment continuum* • *Assessment outcomes*
Developing practice readiness	• *Transition continuum* • *Right environment to flourish*

6.2 Dominance of Context

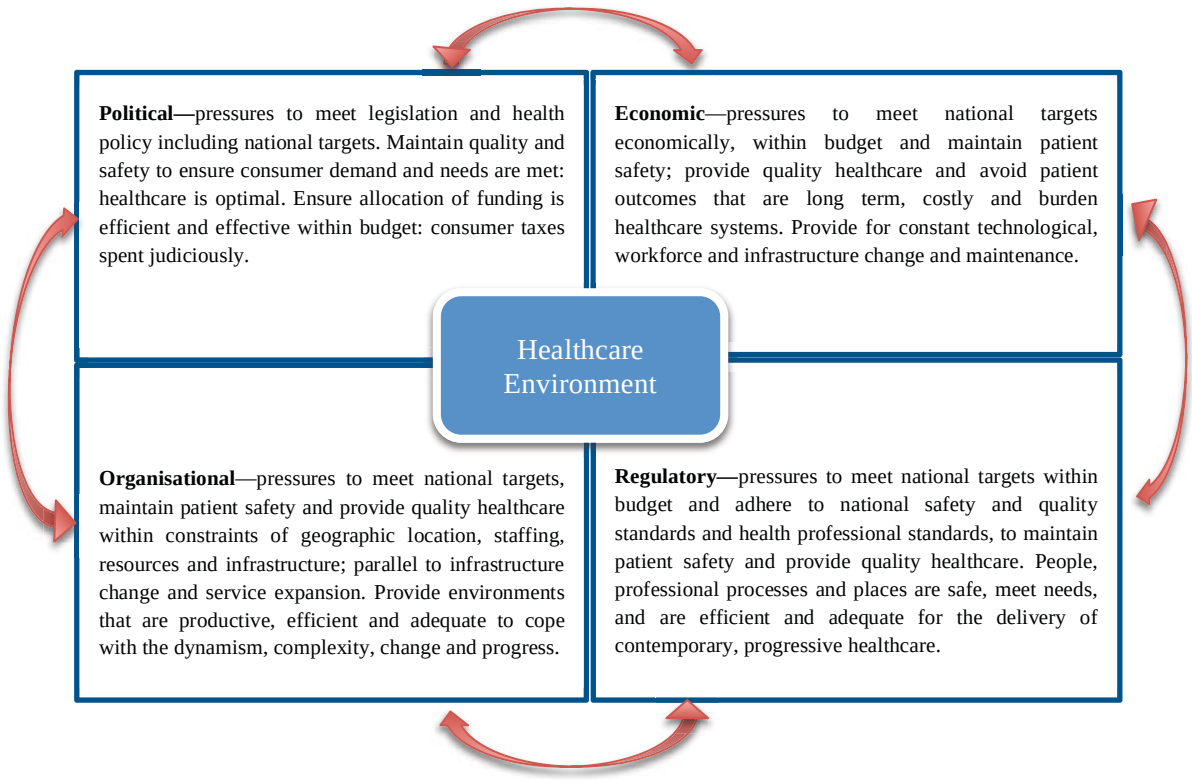
Dominance of context describes how certain characteristics of contemporary healthcare contexts influence HCPs' work practices and decisions about what they need from NGRNs for practice readiness. How the healthcare context affects NGRNs' performance and consequently, HCPs' perceptions of a NGRN's level of practice readiness, is explained. Findings demonstrate the importance of considering contexts of practice in understanding practice readiness and in the preparation and transition of NGRNs to the workplace and the role of a RN. These findings are discussed in two subcategories: *Healthcare system and environment* and *People and the quality of workplace interactions*

6.2.1 Healthcare System and Environment

The 'healthcare system and environment' encompasses how the increasing pressure on the broader healthcare system affects HCPs' immediate context of practice and their decisions about what is required for practice readiness. These contexts have a powerful influence on what HCPs perceive and decide NGRNs require for practice readiness. Certain characteristics of healthcare environments are particularly influential in HCPs' perceptions and decisions and include the overall complexity and dynamics of the healthcare system; the geographic location and service capacity of the healthcare workplace; and the clinical setting and specialty.

HCPs described healthcare environments as complex and capricious, constantly changing and at times chaotic. They highlighted external and internal factors related to the provision of healthcare that constantly exerted pressure, stimulated change and modified their context of practice. While subtle case variations existed, four broad areas of influence were evident: political, economic, organisational and regulatory. These are outlined in Figure 10.

Figure 10: External and internal factors influencing the healthcare environment



The following participant quote captures what many participants described as happening in their healthcare organisations and workplaces as a result of external changes in the healthcare system:

> *it's become a very high-pressured environment. Now, people will say that healthcare was always high-pressured, but the screws have been turned even harder … that busyness now goes out to all our wards. There's such high turnover of patients. The patients that come through are sicker. They are more complex than they were. People are living longer, they've got more illnesses, they present with more comorbidities, and the pressure is on. From the moment they're admitted, their journey is tracked until they're ready for discharge. That whole process is pressured.* [C4: P14M]

As discussed in Chapter 5, each HCP site had experienced significant change between 2013 and 2016, changes that were reflected in government and organisational reports and participants' comments about each site. Political changes at a national and state level had resulted in a restructure of healthcare service governance and delivery in Queensland. As a result, a number of organisational structures altered. The pressure to provide cost-efficient healthcare and a reallocation of fiscal resources introduced economic restrictions to health service budgets and staffing. Staffing issues for the healthcare workforce were prominent and related to staff shortages, turnover and the associated costs. These factors increase the demand, dynamism and pressure in healthcare workplaces. Recruitment efforts needed to focus on assessing new employees for capabilities to work in these environments, enhance retention and reduce turnover. A philosophy of *'grow your own'* [C1: P1HR] and finding individuals that are the *'right fit or fit for purpose'* [C3: P8HR] now underpins the recruitment process. Candidates were assessed for having the right set of capabilities for an organisation, team, ward or unit. Consequently, when recruiting, participants in this study sought NGRNs with the capability to work effectively and safely within a complex healthcare system and dynamic, demanding workplace environments that require specific capabilities to provide safe nursing care.

It is evident that knowledge and understanding of the wider healthcare system, organisation and processes within an organisation strengthens an individual's ability to function professionally, efficiently and competently when providing care. Therefore, as part of being practice ready, NGRNs need to have knowledge of the *'system they are going into'* [C3:

P9HR] and the local processes of the organisation where they are employed. This knowledge can enhance their ability to access information and support, be independent and know their limitations, and consequently maintain patient safety:

> *when a grad walks into a hospital and has a basic understanding of a hospital function … just that basic understanding of this is how a shift runs, this is sort of the things that I could expect to have to complete during my day and … from a broader context it's actually the healthcare system in itself.* [C1: P9N]

Infrastructure and constant modifications to it affect organisational and staff functionality. Renovations, repair and service extensions were evident in this study with one HCP site settling into a new facility and two HCP sites preparing for digital-based service delivery. Orientating oneself and accessing resources with change can be time consuming and inefficient. Therefore, NGRNs need to be self-directed and resourceful to work efficiently. This requires a level of independence and critical thinking. In newer or renovated facilities in this study, the design generally improved the atmosphere, workflow and functionality and could even change the demeanour of staff:

> *I mean their ED... Just your whole—everybody's demeanour, even when they're busy, they're just—you're not tripping over each other, good access to computers, all of those sorts of things, for nursing staff and medical staff. It makes a huge difference, you just don't get so uptight and stressed out and try and run away and hide in a corner.* [C2: P2M]

Conversely, the physical layout of a facility or unit can restrict movement and support, and affect staff and patient safety. Examples in this study include the capacity of medication rooms at a new facility to accommodate a high volume of activity [C3]; while at an older facility, limited access to computer or desk space made it more difficult to complete patient care responsibilities [C2]. One nurse participant described how the new design of private rooms restricted viewing to the bedside, which meant that NGRNs working in these rooms were more isolated [C3]. In the following example, a doctor describes how the layout of an ED reduces the ability to support staff and patients safely and efficiently:

> *it's appalling, it is really appalling it is dangerous … our re-sus area is totally away from the main work area. You're pulling staff off the floor to go into re-sus, and if*

you've got someone in re-sus for several hours, you lose staff off the floor and the rest of your department's understaffed. It's terrible, it's dangerous. [C2: P2M]

In these circumstances, NGRNs can find they need to manage multiple commitments within limited resources or without support. Being able to function independently and negotiate time, resources and patient care are prerequisite capabilities to cope, along with a commitment to the role:

They would need a huge amount of resilience, courage, and dedication. They'd need to have that passion to keep going, despite the fact that they wouldn't get any support. [C3: P11N]

The pace of clinical activity within their healthcare environments led HCPs to recommend that NGRNs be resilient and able to adapt to change. The pace of work was described as high-pressured and demanding. A continual momentum: *'bang-bang-bang'* [C2: P7N] occurred where high workloads and operational demand constantly put pressure on staff. At times there were *'no breaks, no stopping'; 'no nice load'* and everything was *'horrible'* [C3: P5N]. Negative staff interactions could occur, and when people became *'snappy'*, *'dangerous'* situations could arise for staff and patients [C3: P5N]:

Healthcare is a complex system, it has been called the edge of chaos, where the system is pushed to the edge, the edge of the envelope. What we talk about is we're on the edge; when your work practice is such that you feel like things are about to get out of control, which a patient may need to—may come to harm. [C4: P14M]

Change in the healthcare workplace is often generated by the constant introduction of new policies, standards, and practices: '*every time they turn around someone throws a piece of paper at them. Like, someone didn't do this in a coroner's case; have another piece of paper'*. [C1: P1N]. Managing patient care, adhering to regulations and maintaining professional standards within a healthcare system that is under continual stress with rapid change and evolution, is challenging. High workloads are common and can be unmanageable at times.

In these environments, the activity can be *'frantic and chaotic'* and can affect patient care when *'patients and families could get overwhelmed and may not get heard'* [C3: P14AH]. This was particularly prominent in surgical and medical areas where constant heavy

workloads were generated from rapid turnover and non-stop churn of complex clients characterised the clinical activity in the workplace:

> *The last 3, 4 weeks, it's just been horrendous. The girls have just been working hard. It's just crazy. I don't think it's ever going to slow down, though. It's just the way the nursing is.* [C3: P7N]

The level of clinical activity within healthcare environments has become increasingly demanding and this challenged the ability of the HCPs to simultaneously manage workloads and support NGRNs. This situation created personal and professional conflicts for staff that caused feelings of guilt about not being able to provide support. With multiple new graduate disciplines at any one time, staff may have wanted to help; however challenging workloads made this impossible:

> *workload … I see now, that the people who would like to be able to help are in themselves compromised with workloads that they can't manage.* [C2: P12M]

Over time, nurses become stressed, face compassion fatigue and can lose empathy. Work becomes unfulfilling and a matter of ticking boxes and completing tasks on the time planner. In such circumstances, supporting NGRNs becomes an additional workload burden and can lead to negative attitudes that may affect NGRNs:

> *People are already stressed, and then a new grad comes in and then they're like, they should know how to do all this stuff. What's uni doing? And it's like—I think some nurses are struggling with either burnout or compassion fatigue, I think that's probably where some of that empathy's gone. They just can't do it anymore.* [C2: P1N]

Complex demanding environments can affect attitudes to work and inhibit communication, teamwork and support, where getting help can be difficult or like *'pulling teeth'* [C3: P14AH], particularly when senior nurses are stressed and *'people get snappy'* [C3: P5N]. When the stressed person is a team leader, it can influence the entire ward:

> *It's horrible; you just go home and want to drink. You want to have liver failure; it was really bad, where nobody got their breaks for 2 weeks straight, basically. We just didn't stop, from the minute you hit the floor to the minute you go home. It was just, it was just full-on, you were moving patients here to get patients in, and they*

> *were all heavy patients, patients who weren't going anywhere, sick, there was no nice, light load … everyone, the team leader were pulling their hair out … some get really snappy. Some people stress more than others, which then obviously, if the team leader's stressed, well, that will flow through to everybody.* [C3: P5N]

These busy complex environments can be overwhelming and scary for NGRNs, a *'big shock'* and *'very upsetting'* [C3: P7N]. The pace and activity increases the pressure on NGRNs to perform independently and for NGRNs this can be *'really hard to cope with when you start'* [C3: P6N]. One participant in this study warned that when things became too complex and support was minimal, NGRNs needed to be watched carefully as *'they can start to implode'* as they try to manage everything on their own [C3: P5N]. Even though NGRNs had been exposed to these environments as students, they had not experienced the full weight of this responsibility as a RN, and the experience could be unexpected and overwhelming:

> *It is a big shock for them, that's what I think because, there's a lot—I don't think as students they actually get the exposure of what exactly nursing is. Because they're always supported, aren't they? They always work with the staff. At the end of the day, they work with an RN and they escalate their concern to the RN, and the RN is the one who's actually solving all the issues and everything. So I think once they hit the floor and they are the one who's actually dealing with all this stuff, it can be quite overwhelming. I have seen a few tears.* [C3: P7N]

When staff are stressed and busy they can appear anxious and flustered or unapproachable; for NGRNs seeking help, this can be difficult:

> *I think just sometimes that chaotic environment … I think people can seem so busy and I think that can be something that would detract someone wanting to interrupt someone.* [C3: P14AH]

When support mechanisms for NGRNs are compromised, NGRNs can be left to cope with unpleasant situations that may be out of their depth. Such circumstances can leave a NGRN '*struggling to keep up and floundering'* [C4: P1N], giving the impression that they are not practice ready. NGRNs can go home feeling inadequate, hopeless and disillusioned with their choice of career:

> *We've had grad nurses come through … and they're dropped into a new environment, new ward, and they're not put to work with somebody to look after them, and they get hit with an awful, awful shift. You know, heavy workloads, lack of staff, whatever. And they're left to go home and think, 'What the hell'. Sometimes it can take away their confidence and sometimes it makes them question their own capabilities and whether or not they actually want to be in this profession … I think that's a part of some of the reasons why we lose some of these grad nurses.* [C2: P6N]

> *I think that part of the fallout of nursing there's a lot of nurses who graduate who don't stay in the system … they're not nurtured … they come into a hospital situation and they don't see it as a nurturing embracing situation … and say, 'I don't need to be here and put up with this sort of stuff'.* [C1: P5M]

In healthcare environments where stress levels are constantly high and churn is maximum, clinical care may be compromised and patients put at risk of harm. NGRNs need to be prepared with specific capabilities to help them thrive, successfully navigate healthcare's fast-paced, unpredictable complexities and provide a safe quality of healthcare. For practice readiness, *'the ability to function in rapidly changing circumstances'* [C2: P7M] is essential, as *'the enablers to graduates, are personal qualities of flexibility, resilience, communication … the flexibility to adapt'* [C1: P3N]. NGRNs must be able to think critically and communicate effectively while being '*organized and managing [their] time well*' [C2: P8N]. NGRNs demonstrating some or all of these characteristics were described as being more practice ready and resilient, as they were better able to cope with the stress associated with the dynamism, high pressure and constraint prevalent in healthcare environments:

> *Healthcare is a very complex and stressful environment, there will always be workload, financial and political pressures on the healthcare system, and to survive in that system and not burn out, you need to develop resilient traits.* [C4: P14 M]

The capabilities that NGRNs require also change with the geographic location of the HCP site. There was a distinct set of capabilities prioritised for practice readiness in rural and remote locations. In these locations, reduced access to social support, transport and general goods and services shaped a challenging personal and professional environment. All participants from the remote case [C1] prioritised high-level communication skills,

knowledge of the geographic location and local community, and inclusive practice as necessary for practice readiness. The reduced availability of familiar support networks in rural and remote locations can result in a workplace that is personally isolating. Communities are small and professional and personal relationships can sometimes overlap in social, community and healthcare settings. Maintaining a supportive social network is imperative to being able to adapt and cope with the isolation and environmental constraints posed by these locations. A NGRN's capability to build relationships is reliant on having the necessary interpersonal skills to cultivate supportive relationships, handle the isolation and maintain professional interactions:

> *I think communication skills would be number one. I know the clinical competency has to be at the forefront, but if you can't communicate well, you're not going to succeed in our communities out here.* [C1: P1HR]

Being resilient and having a passion and commitment for rural and remote nursing are also essential to 'survive' and cope with rural and remote locations:

> *I think rural nursing isn't for everyone. So if they've got that drive and that passion, then they'll be okay, but if they don't have that drive, don't have that passion, then you won't survive.* [C4: P4N]

Participants from the remote case [C1] prioritised the ability to work with culturally diverse communities as essential for rural and remote nursing practice. While identified as a necessity for other geographic locations, it was prioritised for these locations. Local communities in remote Australia are characterised by high numbers of immigrants, Aboriginal and Torres Strait Islander people, and different socioeconomic groups. NGRNs need to be able to communicate appropriately with these diverse client groups and engage in inclusive practice such as *'treating a person with the respect that's, despite cultural differences, despite economical background'* [C1: P7N]:

> *So number one would be given the demographical nature of C1, 25% of the population is Aboriginal. So, people who really want to work here, they have got to have that sense of inclusive practice.* [C1: P7N]

> *If they were going into areas that were Indigenous populations or large refugee-type populations or people from non-English speaking backgrounds then the communication would be even more important.* [C3: P8HR]

All participants in C1 suggested that as part of being practice ready, NGRNs also needed to know about the local infrastructure, particularly the limited access to resources and accessibility to the location. Having knowledge of *'where they were coming'* [C1: P4N], helped to adjust to the constraints and work better with the community:

> *We know through research and through our own research when you recruit someone who's experienced remote lifestyle, whether they've grown up in it, or they've at least done placement, there's less reality shock, there's less culture shock, they've got an easy transition into the workplace … they understand they're in a very isolated, remote community that you may not be able just to go home—I need them to understand they are away from family and they are isolated in a new job.* [C1: P3N]

The knowledge and skills participants recommended for clinical practice in rural and remote locations and smaller HCP sites were also different to what was recommended for larger inner and outer regional HCP sites where services were more diverse and specialised. In C1 [R] and C2 [SOR] a broad deep scope of general knowledge and skills was preferred for RNs where *'you're not a specialist, you know a little bit about everything'* [C2: P8N]. These HCP sites had limited access to specialist services and RNs found themselves working with a range of clinical situations and across units, wards or specialties. Being prepared with a broad scope of general knowledge and skills enables the provision of relevant, safe clinical care across varied clinical situations and areas:

> *I'm thinking it might be more of an isolated work environment where there's less staff around, less support, there mightn't be access to other specialties whether it be nurses who are in clinical areas like a respiratory nurse or a cardiac nurse or whatever else who have got that advanced knowledge and skills to be able to help you out on the spot there. And there mightn't be as much, even medical support or allied health support as well, so they may need a variety of extra skills to be able to fill those gaps where there's a deficiency in those areas.* [C3: P10AH]

Generalist skills for rural and remote locations include the ability to assess and treat clients safely and effectively, and being flexible in managing time and prioritising care and

services. These skills, coupled with an ability to know and work within one's scope of practice, are essential to provide appropriate care and keep patients and staff safe:

> *We're not like* [LOR hospital] *where you've got a whole ward of the exact same type of thing. You've got to be able to be elastic and flexible … you get admissions all the time; it could be a child, it could be a rotten toe, it could be someone for theatre. Knowing prioritising and knowing what's important to do* [is essential]. [C2: P8N]

Different capabilities were also identified or prioritised for different clinical settings where specific levels of proficiency were necessary to provide the required standard of care. Some clinical areas required particular clinical skills and experience; others prioritised certain knowledge; and others, attributes to manage the pace, acuity or age of client groups, for example aged care or paediatrics:

> *Skills they need depend on where they work: there is no longer general wards—every area is specialised … and every area has their top 10 clinical skills because they are all different.* [C3: P3N]

Aside from the capabilities for rural and remote locations, the most prominent distinction in capability is associated with specialty areas. In this study, these included community health, emergency, renal, neonatal and intensive care, medical imaging, MH and paediatrics. These areas vary in their nursing practice and models of care, unlike in a general medical or surgical area. The level of proficiency, independence and autonomy, time and workload management can vary between settings—for example, a community setting as opposed to an acute care setting such as an intensive care unit (ICU) or medical imaging. A team of nurses with varied skills may nurse clients on a medical or surgical unit, yet in ICU or neonatal ICU, patient-to-nurse ratio may be 1:1 or 1:2. In the ED, the clinical environment can be unpredictable where the pace, roles and responsibilities may be dispersed across a large team and require a rapid assessment and quick client turnover:

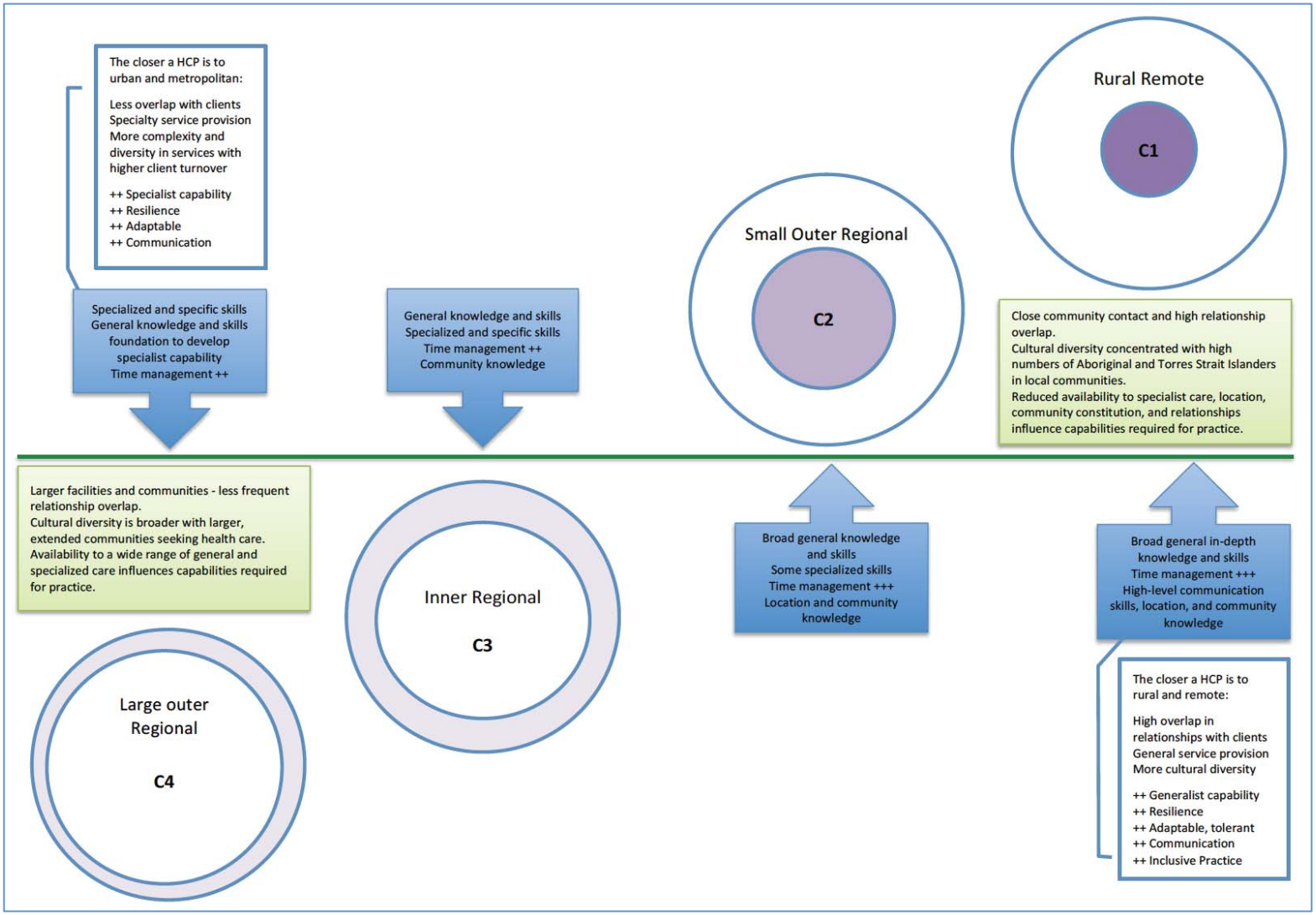
> *Someone who can't think quick and cope with high pressure is not going to cope in an emergency department, just straight-up … I look at some of those areas, there's ones that come to mind, ED, renal, mental health, emergency, ICU, when you look at it some of the skillsets that those guys require it takes a special sort of person.* [C3: P9HR]

While the majority of these cases accepted NGRNs into specialty areas, the HCPs recognised that these NGRNs were not ready for these areas, indicating that the necessary capabilities went beyond what was acquired during a pre-registration education program. This inadequate preparation can have consequences for the NGRN who may struggle to provide the required standard of care. When the busyness of the ward is such that adequate support and supervision from senior staff is limited, the NGRN can lose their confidence, have delayed development or provide substandard care. NGRNs who come to a specialty area after a general setting adapt better and develop the required level of capability more rapidly. Consequently, a foundational set of general knowledge and skills, consolidated in a general placement prior to coming into specialty practice, was recommended for NGRNs:

> *I haven't seen many being ready for intensive care. I think they need to be a super special grad nurse. I think it's really difficult to walk into a specialist area without any generalist experience. Sometimes it's a bit dangerous because I don't know that there can be enough buddying and enough orientation time to cope with what's going on.* [C4: P6N]

The healthcare context is crucial in determining the level and type of capabilities NGRNs require for practice readiness. Given the diversity of participants' context of practice, variation in these requirements is inevitable. Figure 11 presents the contextual factors that influence HCPs' perceptions and decisions about practice readiness. The increasing pressure, complexity and healthcare demand within healthcare lead HCPs to seek and prioritise specific capabilities for practice readiness. The figure demonstrates how the capabilities that HCPs seek change with the geographic location; size; diversity and intimacy of the relationships with the community; size and breadth of the facility and HHS; the level of clinical activity; services provided; and area of practice.

Figure 11: Contextual influence on practice readiness decisions



6.2.2 People and the Quality of Workplace Interactions

'People and the quality of workplace interactions' describes how social interactions between NGRNs and HCPs influence a NGRN's performance. These interactions stem from both the increased healthcare demands on HCPs and the personal characteristics of individuals that NGRNs encounter in the workplace. The quality and type of interactions NGRNs experience can positively or negatively influence their performance and affect their organisational and professional socialisation. NGRNs can experience a mix of interactions that either enables them to thrive, fit in and demonstrate their actual level of practice readiness; or causes them to be isolated and to flounder, and undermines their ability to demonstrate readiness. These circumstances can lead to misaligned assessments of a NGRN's practice readiness and consequently support that has the potential to affect a NGRNs first year experience and intent to remain in or leave nursing:

> *I think their* [NGRNs] *performance depends so much on what the culture is like as well and how much that influences how they feel about working in the environment that they're in … Only when they feel comfortable to ask for support otherwise they'll flounder away and nobody has spoken to them and then they just get labelled as whatever but it's so important to have that nurse that they trust and that they can go to and if that's not there then … they flounder, and through no fault of their own.* [C1: P2N]

The interactions that NGRNs encounter are outlined in Table 22 and fall into two broad groups: positive interactions—those associated with NGRNs being supported, thriving and fitting in; and negative interactions, which are associated with NGRNs being intimidated, struggling and isolated.

Positive Interactions—Thriving and Fitting in

Positive interactions between HCPs and NGRNs were described as those that convey an open, friendly and approachable attitude towards NGRNs and offer respect and continuous support and encouragement. This type of interaction nurtures NGRNs, alleviates anxieties, builds confidence and accelerates a NGRN's integration into the workplace, and their learning and development.

Table 22: Workplace interactions and outcomes

<table>
<tr><th colspan="2">Positive interactions</th><th colspan="2">Negative interactions</th></tr>
<tr><th>Associated qualities</th><th>Outcomes</th><th>Associated qualities</th><th>Outcomes</th></tr>
<tr><td>Associated with NGRN being supported, thriving and fitting in</td><td>Able to demonstrate practice readiness</td><td>Associated with NGRNs being intimidated, struggling and isolated</td><td>Unable to demonstrate practice readiness</td></tr>
<tr><td>Flexible, approachable, accepting, friendly personalities</td><td rowspan="6">• Increased confidence
• Happy, keen, enthusiastic
• Inclusion
• Inspired
• Flourish and cope
• Safe patient care
• Labelled and branded positively
• Growth and development
• Independent practice
• Transition 3–6 months
• Minimal sick leave
• Retention</td><td>Inflexible, dominating, strong personalities</td><td rowspan="6">• Reduced confidence
• Overwhelmed, anxious, scared, crying, sick
• Exclusion
• Demotivated and disillusioned
• Floundering and struggling
• Errors—unsafe care
• Labelled and branded negatively
• Reduced development and progress
• Long-term support
• Transition 12 months or more
• Increased sick leave
• Leaving</td></tr>
<tr><td>Open, friendly, firm, polite communication style</td><td>Abrupt, closed, sharp, short and dismissive communication style</td></tr>
<tr><td>Respect, empathise, and encourage with constructive feedback and learning opportunities</td><td>Disrespect, dismiss, belittle and intimidate, minimal feedback that undermines performance</td></tr>
<tr><td>Share positive, constructive opinions among staff</td><td>Share negative destructive opinions among staff</td></tr>
<tr><td>Welcome, include, and collaborate, help</td><td>Ignore and exclude</td></tr>
<tr><td>Allocation appropriate, fair and equitable workloads</td><td>Allocate unfair and overwhelming workloads</td></tr>
</table>

Open and respectful interactions such as showing an interest in NGRNs, listening to and accessing a NGRN's knowledge are positive interactions that build rapport and facilitate inclusion. When staff are *'including them, and valuing them as a colleague'* [C1: P10AH] NGRNs *'feel like they belong'* as part of the healthcare team, which *'gets them off to a good start'* [C2: P7N]. As a result, a NGRN is likely to feel valued and confident that they are supported to perform to their capability:

> *Just having a comfortable greet ourselves or just tell them that 'If you need a hand we can come around and help you'*. [C3: P6N].

NGRNs need to be '*given a pathway to express any concerns and* [know] *that those concerns are valued*' [C1: P5M]. Positive interactions that convey that staff are available and approachable enable NGRNs to readily seek support, without feeling intimidated or stupid.

Being able to ask questions without feeling incompetent enables NGRNs to be open about their limitations and apprehensions. Approachability was conveyed in the general comments, feedback and behaviours staff had with NGRNs:

> *I guess I'm just more there and saying come and get me if you need anything, I'm just going to be over here doing whatever I'm doing, just come and grab me. I feel like they come out of their shell a little more and they're more likely to ask questions and I guess they're not so worried about looking like you know, dumb grad I don't know anything.* [C4: P5N]

In some cases, talking with NGRNs about their expectations and offering understanding positively addresses feelings of inadequacy and can help alleviate a NGRN's concerns about making mistakes and not knowing what to do. These actions convey to NGRNs that they are supported to learn. When NGRNs are approached about issues in a helpful, constructive manner as opposed to an intimidating or reprimanding one, they are more likely to open up about their limitations and be keen to address performance gaps:

> *if something has gone wrong, not making a big scene about how terrible it was but looking going, 'Well, next time this is what we'll do and next time come and grab me or somebody and we'll show you' … they've had someone who's come up and said that to them, so it makes a bit of a difference.* [C2: P8N]

Similarly, encouraging NGRNs to express their concerns and limitations enables HCPs to better support them and continuously provide reassurance:

> *the new post grads who are saying 'hey I don't know' as well, admitting when they don't know, letting people know that 'hey I'm scared' so that people will say 'hey that's okay, we're here to help you' … making them feel like it's okay, you can feel like that.* [C3: P2N]

Reassurance and constructive, encouraging feedback were described as positive interactions that help mitigate the anxiety many NGRNs experience during their transition from student to RN. In this study, one participant expressed that just being aware, alert, offering helpful prompts and *'giving them extra attention'* [C2: P10AH] are interactions that convey support without being intimidating or oppressive. Another described this as '*being gentle to ease the stress'* [C2: P1N] where simple actions such as communicating, demonstrating and letting the

NGRN do a task without taking over offers reassurance that simultaneously increases a NGRN's confidence and capability:

> *We're running lines like six or seven a day, and they're fuddling around and not knowing what to do with this, that and the other. You just say, 'Take your time. You know what you're doing. You've got everything you need. Just take your time. Take your time and look at the process, and think about what you're doing'. Once they do that they're usually good.* [C2: P2N]

When constructive feedback is complemented with positive reinforcement of competent performance *'of the things that are going well'* [C1: P9N], NGRNs are more receptive to feedback in general and less anxious about providing nursing care [C4: P2N]. NGRNs' confidence and self-efficacy about their performance as a nurse improve, which keeps them positive about their work. When NGRNs received acknowledgment by staff, particularly management, changes in their demeanour and motivation could be seen:

> *what I end up doing is praising, sending an email and I cc people, their NUM, their CNC, as an acknowledgement that you are doing a great job and it has been noticed from my level* [Senior NM] *and to keep going … it sort of boosts their ego a little bit to say, 'Hey, I did a really good job today. I'm going to try and do that again tomorrow'.* [C4: P1N]

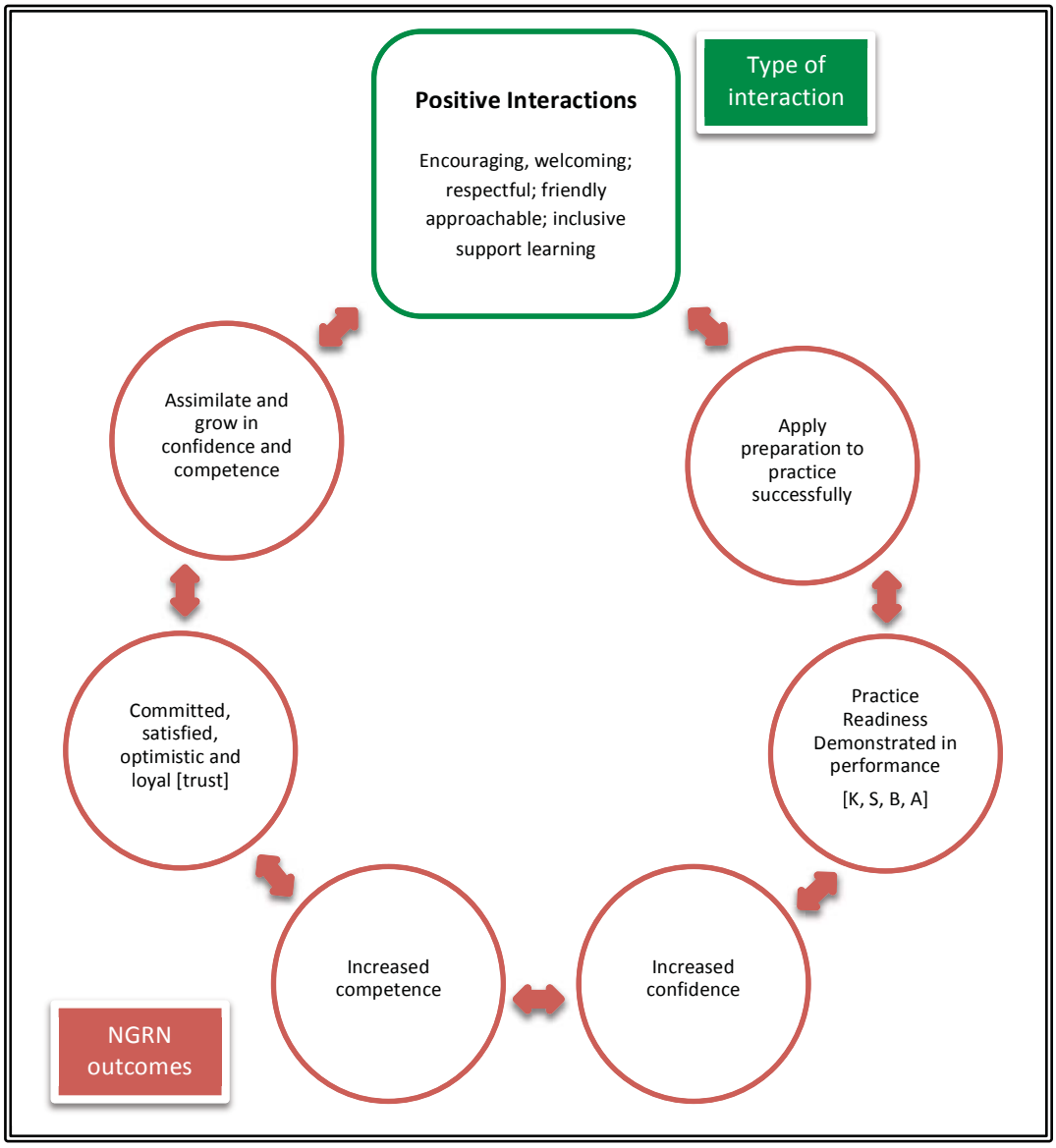
The effect of positive reassurance from a mentor with whom they can check they are doing the right thing can change a NGRN's behaviour where *'readiness becomes a little bit more apparent'* and *'you can see the lift on their face, you can see the drive increase'* [C4: P12N]. These interactions can breed a *'sense of achievement'* [C4: P12N], give work meaning and bring about enjoyable satisfying healthcare experiences. Consequently, despite the challenges experienced in healthcare, NGRNs have positive outcomes that keep them engaged and wanting to remain in nursing:

> *it's that feeling that you've done that wonderful job, you've meant something to somebody, you've made their experience pleasant.* [C4: P13N]

Figure 12 explains the impact and outcome of NGRNs experiencing positive interactions in the workplace environment. When confronted with constant positive interactions NGRNs are supported to apply their pre-registration preparation to practice and able to demonstrate their

practice readiness. The NGRN performs competently, which increases their confidence and competence. As the positive interactions continue, they become less anxious, comfortable in the environment and able to ask for help. They assimilate into the healthcare team easily as valued staff members. The NGRN's commitment and optimism increases and they continue to grow in confidence and competence, and experience further positive interactions. With these types of positive interactions, NGRNs thrive and fit in.

Figure 12: Positive interactions and outcomes



Negative Interactions—Apprehensive, Struggling and Isolated

NGRNs also experience interactions in the workplace that are intimidating, provoke anxiety and create a tense, uncomfortable work environment for them. These are abrupt, unfriendly or dismissive interactions that *'make* [a NGRN] *clam up'* [C3: P6N] and withdraw, and may impede their ability to successfully integrate into the workplace. Negative interactions can disempower NGRNs, undermine their confidence, constrain their access to support and lead to NGRN turnover and attrition:

> *What would happen? Two things, the graduate would leave, and they would leave nursing. So the graduate gets neglected, the graduate gets potentially bullied, bullied by a non-graduate because they don't have the personal quality or ability … A non-graduate would pick at the graduate rather than work and build capacity. They would detract and bring down the graduate and … no, no, a graduate will not flourish. A graduate will not move past novice ever, they'll become disempowered.* [C1: P3N]

In practice, negative interactions can be described as questioning or dismissing practice, deliberately withholding support and help, or ignoring and not talking with NGRNs:

> *When you come to the ward if you see people not really friendly, doing their own stuff and they don't talk to you at all.* [C3: P6N]

Unapproachable staff and abrupt interactions can undermine a NGRN's confidence, ability to ask for help and opportunities to grow. Negative interactions can leave NGRNs scared to ask questions and feeling isolated: '*Abrupt nurses. I've seen them freak out too many people, and their* [NGRNs] *too scared to ask questions and then they don't get to ask questions*' [C4: P6N]. Openly chastising a NGRN's performance in public, or statements such as *'you should know that'; 'haven't you done that'* [C4: P6N] are interactions that intimidate NGRNs and cause them to '*go quiet and withdraw'*:

> *Undermine their confidence … they don't help them sometimes. There's not many but there's a few that look at them and say, 'Well you're the RN. Get on with it', question why they're doing something, not in a way that's like extracting what you're thinking, it's like, 'Well what are you doing that for?' It's just the attitude. They don't foster a belief in themselves* [the NGRN] *that they can do this and that what they're doing is actually okay. That it is okay to ask for help and it is. Things like—what have I seen. 'I haven't got time for this'.* [C2: P6N]

Described as *'nurses eating their young', 'a subtle sort of bullying'* [C2: P7N] and *'the whole hen-picking thing'* where staff are *'chewing them up and spitting them out'* [C4: P2N], these interactions were identified as one of the main reasons NGRNs were not able to demonstrate their practice readiness, flourish and fit in. Specific interactions interpreted by participants as 'eating their young' included: *'been on their back', 'beaten up by fellow coworkers', 'ripped to shreds'* [C4: P12N]; *'ride their back all the time',* and *'flag them as targets'* [C3: P5N]; indifferent attitudes and behaviours. Allocation of difficult, high workloads was also classed as a negative interaction:

> *They gave her the shit patients, they put her into a situation of basic isolation and lack of support, know your place*. [C3: P5N]

In some cases, these behaviours were seen as part of the nursing culture, which can be *'cutthroat and bitchy'* [C4: P7N] and often *'difficult to adjust to'* [C4: P10N]. Fitting in to the culture is an initiation or an *'intimidation process'* where one must *'earn your right'* and in which NGRNs, particularly the young ones, *'cop it'* [C4: P12N], most often from experienced senior *'older school, or older nurses'* [C2: P1N]:

> *I think there are still some who don't tolerate new grads very well—there will be a couple like that or those who are hospital trained, brought up in the old way and you had to sink or swim or do whatever*. [C3: P2N]

Some of these interactions, however, may be the result of how NGRNs themselves interacted with staff, if the NGRN was overconfident and had a *'cocky attitude that upset others'* [C4: P1N]. These NGRNs were described as believing they knew more than they did, lacking insight and not open to receiving help. When staff are busy they become frustrated trying to help and their *'patience wears thin'* [C3: P3N]. As a result, staff *'don't want to work with them'* [C3: P3N] or withdraw support [C4: P13N], which can be perceived as unhelpful. In other instances, the NGRN was perceived as not practice ready and left alone because staff may not have had time or felt unable to support them:

> *They're really quite good grads but they've come across a bit too cocky and that's upset the other nurses and they really do eat their young. They have that mentality of just, 'Oh my God, let's just chew 'em up and spit 'em out and see what happens'*. [C4: P1N]

> *She was a lot more work, to just get her up to a good standard so that then the staff wouldn't be sort of so 'I don't want to work with her' and 'she takes so much time' so you try and work through it.* [C3: P2N]

Negative interactions can be '*really damaging'* for NGRNs [C4: P12N] and may *'change the way a NGRN shows up to work'* [C4: P11N]. The results may be a range of emotional, physical and behavioural responses from NGRNs. These responses include being petrified, anxious, scared, nervous and uneasy, overwhelmed, crying, withdrawing and being physically sick:

> *They cry. They cry but they don't put their 100% into it. They don't necessarily put 100% in. They call in sick. They do call in sick or they sit in their car and they shake and they … ring us from the car park. And they hyperventilate and say, 'I don't want to go into that place. It's just awful'.* [C4: P89N]

> *I remember one particular case, maybe last year or the year before in day surgery, we had a grad come down in hysterics, absolutely hysterically upset, because of a doctor … she was devastated.* [C4: P8N]

Negative interactions can undermine a NGRN's confidence, performance and enthusiasm for nursing. If the NGRN is not able to access support, they can feel isolated. In such circumstances, the potential for errors, making mistakes or '*doing something silly or dangerous'* [C4: P6N] is heightened and patient safety compromised. These outcomes can leave NGRNs unable to work effectively and demonstrate their practice readiness. NGRNs are then labelled *'not practice ready'* [C2: P13N], which further reduces their ability to assimilate and be accepted:

> *I wonder if maybe the ones that people think aren't practice ready might feel ostracised, like, people don't give them the time or people think they're stupid, or whatever it might be.* [C1: P3N]

As a way of accessing support, NGRNs will avoid these staff and seek help from approachable and friendly staff; consequently, the workload of these staff will increase, which can be frustrating for them.

Often judgments or opinions about NGRNs and their performance are shared in interactions among team members. These shared opinions are a powerful mechanism that simultaneously

moderate a healthcare team's perception of and subsequent interactions with the NGRN. *'Word gets around'* [C3: P1N] and staff can adopt opinions and act accordingly to these judgments: *'one person's experience is almost like everyone's experience amongst all'* [C4: P7N]:

> *I've certainly heard people talk about new staff or new grads in that way, you know, 'She's slow, she's stupid, she doesn't know what she's doing'. And I wonder if that then sets the tone for their time on that ward.* [C3: P1N]

Where opinions are positive, supportive interactions are strengthened and the NGRN assimilates more readily into the workplace and is given more opportunity to grow:

> *Depending on that individual's personality and how they fit into the workplace culture because as much as the workplace might be going 'oh another two grads', but if that individual has the personality that fits, it works. And staff are more willing, more than willing to go out of their way.* [C1: P9N]

If opinions are negative, the NGRN can end up being unsupported or disrespected, ignored and isolated. NGRNs perceived to be not practice ready, lazy, stupid or cocky will be talked about, criticised, labelled and ostracised where they are ignored or left alone:

> *I've worked in three different areas at the hospital, if you're slow I can hear other nurses talking about a new grad saying, okay, oh, I've got to work with this person because they're so slow it's going to be a disaster of a day … They interact with each other and it all becomes one person's experience.* [C4: P7N]

> *It goes from that nurse who doesn't like her to the next nurse and to her friends, to the next nurse and to their friends, to the point where half the team have got the same idea of this person before she even got around, which is pre-judgment on their part.* [C4: P12N]

Often the NGRN can *'pick up the vibe that they don't like them*' [C2: P11N], which can make NGRNs more uncertain, anxious and uncomfortable and withdraw further:

> *I think it makes them nervous because they're really not sure where that's coming from … it makes them uncertain about everybody.* [C4: P3N]

NGRNs can feel unsupported, or excluded from the healthcare team, further compounding the stressors they experience:

> *it's intimidating, and they're, they're stressed as it is because, it's a new environment, a new work, they've got more responsibility than they've ever had and it's sort of, it all sort of is compounded on them.* [C3: P5N]

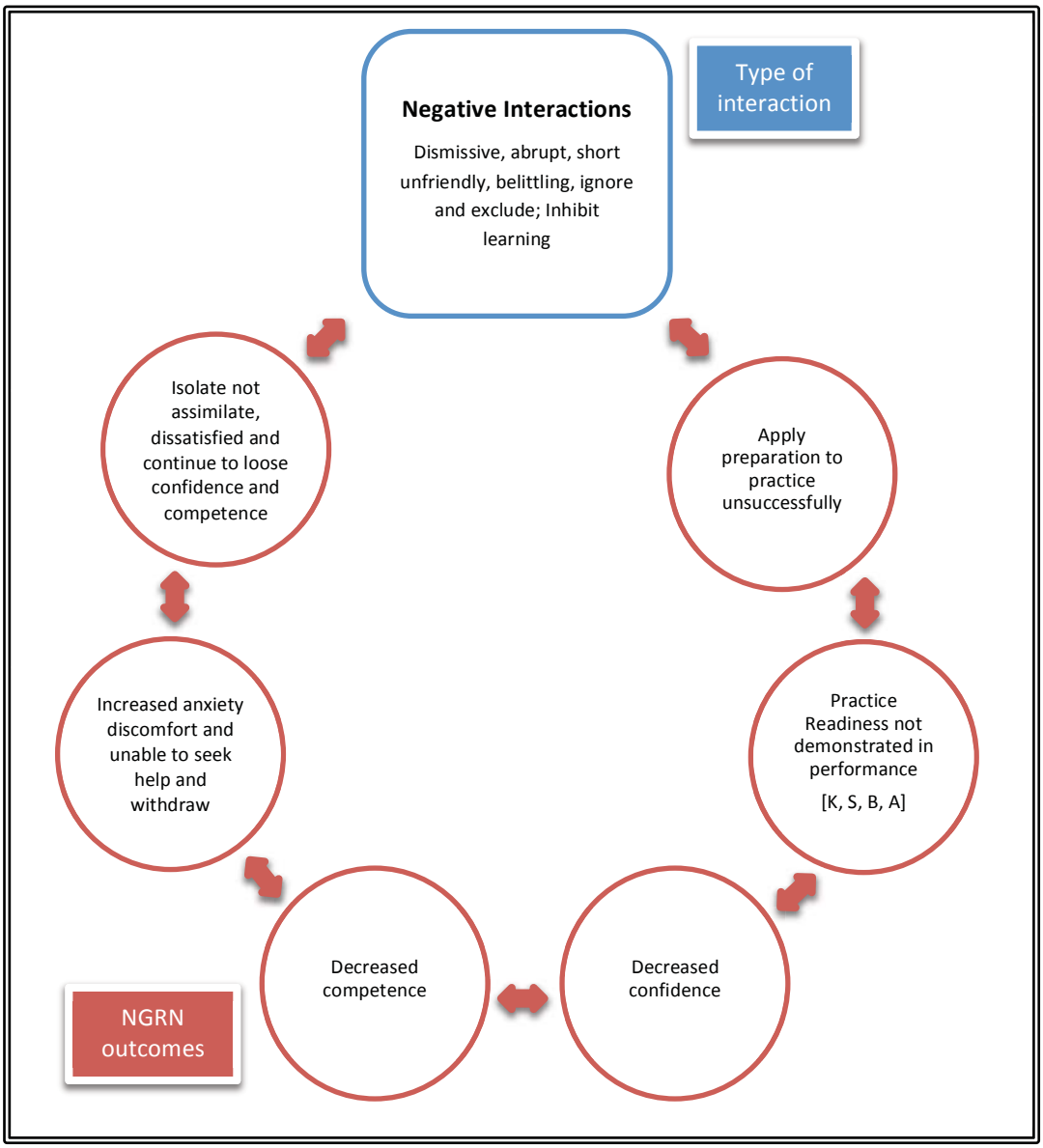
Such adversity erodes a NGRN's confidence and for some leads to the need for long-term support, increased sick leave and in some cases, attrition: *'Sometimes they just quit. I've seen one just leave the unit, you know, not for him'* [C4: P6N]. NGRNs develop a poor perception of self, the profession and the work of a nurse and question their decision to continue in the profession. Some contemplate leaving or leave to seek people and environments where they can be supported or leave the profession all together:

> *They're not likely to stay long in a place that they're not feeling comfortable, or able to ask questions in.* [C4: P6N]

> *I've seen some get more sick leave as well. It doesn't seem to better their practice; it's negative. I've not seen anything good come from that sort of thing, that I can think of. I've only seen negative. And it takes a long path—it's a long time to try and turn them around. It seems that they need oodles more support to turn them around rather than the other way.* [C4: P6N]

Figure 13 explains the impact and outcome of NGRNs experiencing negative interactions in the workplace environment. When confronted with constant negative interactions NGRNs are not supported to apply their pre-registration preparation to practice and unable to demonstrate their practice readiness. The NGRN struggles to perform and flounders. This decreases their confidence and undermines their competence. As the negative interactions continue, they become more anxious, uncomfortable in the environment and unable to ask for help. They withdraw, become more isolated and do not assimilate successfully into the healthcare team. The NGRN's dissatisfaction increases and they continue to lose confidence and competence and experience further negative interactions. With these types of negative interactions, NGRNs struggle and fail to fit in.

Figure 13: Negative interactions and outcomes



6.3 Chapter Summary

The category explored in this chapter, ***Dominance of context***, revealed how factors in the healthcare context and workplace environment can affect HCPs' decisions about a NGRN's performance and practice readiness. An increasingly complex healthcare system reduces HCPs' capacity to adequately support NGRNs and affects NGRNs' ability to manage their responsibilities. In these environments, HCPs prioritise patient care and safety, which can alter their attitude to, and availability for NGRNs. NGRNs can be seen as a help or hindrance to HCPs and experience a mix of positive and negative interactions that can affect their ability

to demonstrate practice readiness. These circumstances can lead to misaligned expectations, assessments and support for NGRNs, which affects their first year experience and intent to remain in the profession. Consequently, HCPs prioritise and seek certain capabilities in NGRNs that enable them to adapt, cope and efficiently manage their responsibilities in capricious healthcare environments. These capabilities are discussed in the following chapter as ***Category 2: Defining practice readiness.***

Chapter 7: Defining Practice Readiness

7.1 Introduction

The aim of this study was to define NGRN practice readiness from the perspective of Australian HCPs and explain the process by which a NGRN is determined to be practice ready. In Chapter 5, the four cases in this collective instrumental case study were introduced. Chapter 6 examined the factors within the healthcare context that influence HCPs' decisions about a NGRN's practice readiness and performance. This chapter presents findings related to ***Category 2: Defining practice readiness*** and illustrates how HCPs define practice readiness (Table 23). The chapter describes the multidimensional capabilities that define practice readiness and provides insight into what HCPs suggest NGRNs need, to be practice ready and to manage the role and responsibilities of a novice RN in healthcare contexts in Australia. Once again, the most illustrative participant quotes are used to capture the essence of the issue being discussed.

Table 23: Major categories and subcategories—Defining practice readiness

Major category	Subcategory
Dominance of context	• *Healthcare system and environment* • *People and the quality of workplace interactions*
Defining practice readiness	• *Multidimensional readiness* • *Confidence underpins performance*
Determining practice readiness	• *The assessment continuum* • *Assessment outcomes*
Developing practice readiness	• *Transition continuum* • *Right environment to flourish*

7.2 Defining Practice Readiness

'Defining practice readiness' describes what HCPs identify as practice readiness. Findings reveal that practice readiness is defined by the capabilities NGRNs demonstrate when they commence practice in a healthcare setting. While the capabilities HCPs associate with practice readiness can vary for different contexts of practice, there are capabilities that traverse all contexts. Practice readiness is multidimensional and encompasses four domains of

readiness: personal, clinical, professional and industry readiness. These domains are interdependent and articulate together in practice to exemplify HCPs' definitions of practice readiness. Findings indicate that personal readiness is the most essential for NGRNs being practice ready and that NGRNs need a balanced level of confidence to perform competently and fulfil the responsibilities of the RN role. The need for NGRNs to be prepared with the capability to cope with change and manage workloads within dynamic complex healthcare settings is prioritised. These findings are discussed in two subcategories: *Multidimensional Readiness* and *Confidence underpins performance*.

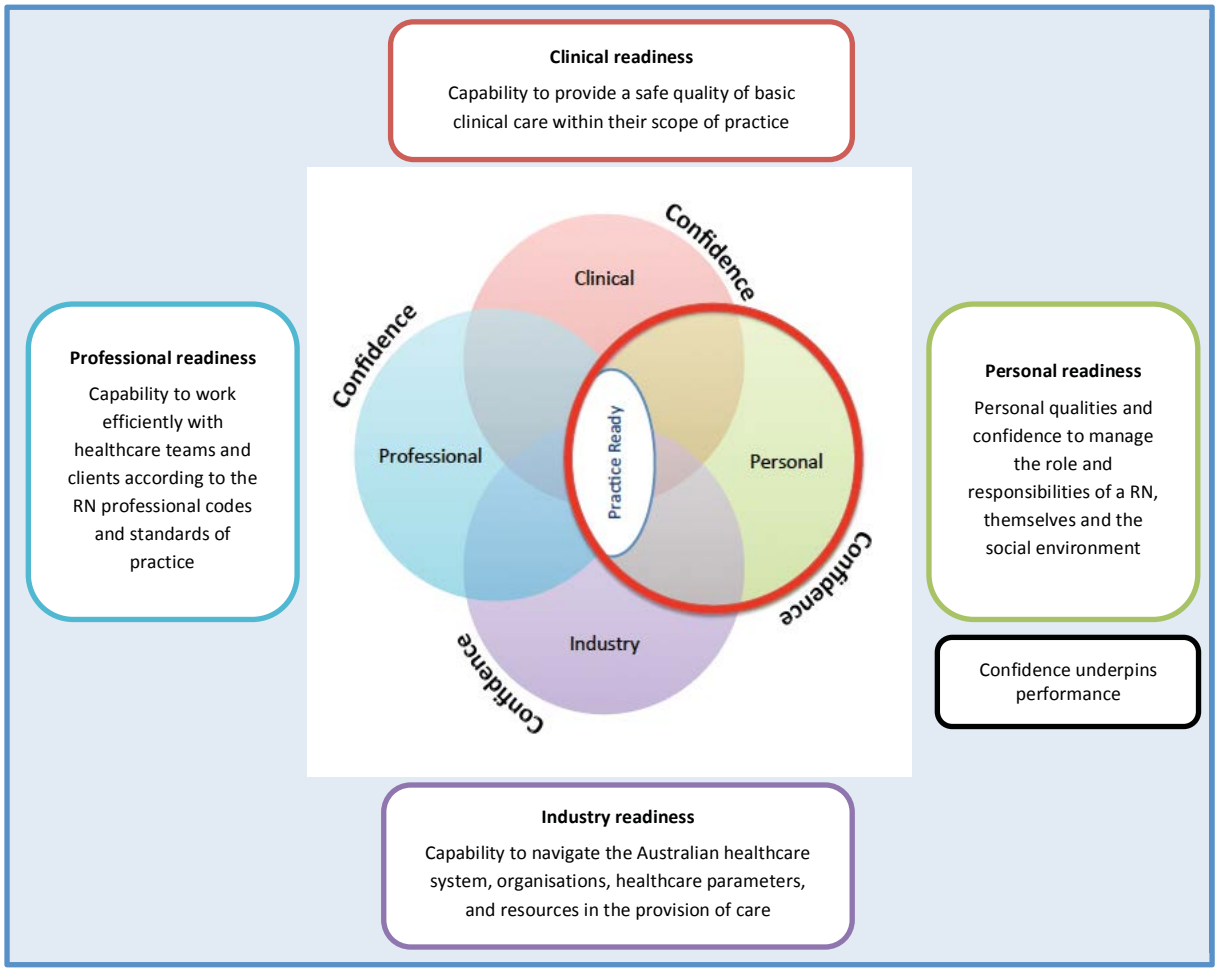
7.2.1 Multidimensional Readiness

'Multidimensional readiness' describes the capabilities that HCPs suggested define NGRN practice readiness. There are four interdependent domains of readiness: *personal, clinical, professional and industry readiness*, which are outlined in Figure 14. The four domains of readiness are interdependent where the capabilities of each domain intersect to represent practice readiness. When a NGRN achieves a basic level of capability in all domains, and these intersect, they demonstrate practice readiness. The NGRN has the capability to successfully manage a normal patient workload with minimal supervision and provide a safe standard of care. HCPs expect this level of readiness to feel confident that patient safety is maintained, clinical care is completed on time, and that workloads and workflow are not disrupted or increased. Personal readiness has the most significant influence on practice readiness and emphasises the need for NGRNs to be able to cope with change and manage workloads within dynamic complex healthcare settings. Figure 14 presents the key features of each domain and how they intersects and the following participant quote describes how these domains can come together in practice:

> *A practice-ready person is a person—I guess we call it putting it all together in nursing. They put it together so they can look, listen, feel, with their senses, and nurses primarily do that through patient assessment. So they use clinical reasoning, patient assessment first … determines … clarify the issue, document and communicate the issue, implement an intervention to remedy or escalate the issue, and/or escalation. Works within parameters of scope, so some can remedy the issue through an intervention, whereas others may need to escalate the issue. They assess, identify, recognise the problem … escalating and discussing, putting it all together, evaluating.* [C1: P3N]

Figure 14: Multidimensional readiness – four interdependent domains

1. ***Personal readiness:*** Personal qualities and confidence to manage the role and responsibilities of a RN, themselves and the social environment
2. ***Clinical readiness:*** Capability to provide a safe quality of basic clinical care within their scope of practice
3. ***Professional readiness:*** Capability to work efficiently with healthcare teams and clients according to the RN professional codes and standards of practice
4. ***Industry readiness:*** Capability to navigate the Australian healthcare system, organisations, healthcare parameters and resources in the provision of care



Personal Readiness

'Personal readiness' encompasses the personal qualities that support a NGRN to successfully manage themselves and the responsibilities of a RN in demanding and capricious healthcare environments. Personal readiness underscores the efficacy of the capabilities in the other domains of readiness. Therefore, HCPs identify personal capabilities as the most important for practice readiness and prioritise these over academic, cognitive and technical capabilities. Being personally ready supports a NGRN to cope with changes experienced during their transition and growth as a RN. Being personally ready involves having a ***positive attitude*** and the ***psychosocial skills*** to cope with and adapt to change and work effectively with others in the provision of a safe standard of care.

Positive attitude: A positive attitude encompasses a range of personal qualities associated with how a NGRN thinks about and approaches their RN responsibilities in the workplace. A person's attitude can *'permeate everything in the workplace environment'* [C3: P5N]; therefore it is important for NGRNs to have the right attitude:

> *what does that mean, attitude? It's communication, and composure, teamwork, respect, trust, values.* [C1: P3N]
>
> *Keen, willing and wanting to be here.* [C2: P5N]

A positive attitude was frequently described by HCPs the right attitude and involved being open, approachable, keen and committed to nursing and their responsibilities as a RN. NGRNs who convey this attitude cultivate a positive atmosphere in the workplace environment and cope better with the workplace dynamism (people, systems, change and complexity). NGRNs with a positive attitude are keen, motivated and committed to their work, where they *'turn up to work on time'* [C4: P5N], are happy to be at work and demonstrate that they *'want to do nursing'* [C2: P9N]. A positive attitude involves being approachable and enthusiastic, and keen to learn with a *'readiness, openness, and willingness to learn and grow'* [C4: P8N]. A NGRN with a positive attitude will ask questions, listen, take initiative and actively seek opportunities to engage in work and learn more. They are *'willing to have to go at anything'* [C2: P3N] and *'want to make mistakes so they can learn from things'*. These attributes affect how a NGRN receives and responds to feedback. Constructive feedback is necessary to improve performance and NGRNs need to be open and able to process the feedback productively: *'take on constructive criticism … you need to be*

able to approach this grad and give feedback' [C4: P5N]. This helps NGRNs learn, develop and be easy to be around and support. Being positive attracts positive interactions that engender good relationships with staff and patients. Members of a healthcare team are more willing to assist a NGRN who is keen and enthusiastic and provide opportunities to support their personal and professional development:

> *the right attitude is a positive one, somebody who's willing to learn, pleasant to get on with, like a good team player … people want to share information with you and be with you, and that communication style that goes with being that sort of person. So that's the attitude.* [C4: P3N]

A positive attitude includes being resilient, flexible and adaptable. These capabilities enable a NGRN to respond and perform effectively in a situation. NGRNs that demonstrate resilience simultaneously manage their day-to-day activities and respond positively to different challenges in the workplace. HCPs described resilience as having a *'thick-skin'* [C2: P1N] and the ability to *'absorb shock'* [C4: P3N], cope with the unpredictable change, challenges and stress in the workplace and move forward. Having a level of resilience enables NGRNs to 'bounce back' under pressure. These NGRNs approach challenges positively and complete their work.

Being resilient and flexible stems from the recognition that the complexity and unpredictable challenges pervade healthcare and create significant stress for NGRNs: '*day to day they're presented with stuff that they're not expecting, they're not the same—it changes*' [C3: P9HR]. Change for NGRNs not only comes with the dynamism in the healthcare workplace but also with multiple rotations that introduce them to different routines and situations, social conventions, staff and client demographics:

> *Every hospital has a different format, from what type of nurse or registrar … so you have to be … willing to adapt and adjust to new environments.* [C3: P13N]

Adapting and assimilating to new environments can be significant sources of stress. NGRNs with resilience are observed to handle this stress and respond to patients positively with reassurance and a safe quality of care. Being flexible and adaptable enhances resilience and helps NGRNs to accommodate constant fluctuations in workplace activity. NGRNs that are *'flexible in thinking'* [C2: P8N] accept differences in clinical practice and reprioritise work

commitments with ease. These capabilities enhance a NGRN's critical thinking and time management and enable them to be resourceful and to work more independently:

> *You've got to be able to be elastic and flexible … Knowing prioritising and knowing what's important to do, you've got to be very flexible and manage your time well; otherwise you can just get caught out.* [C2: P8N]

As a result, NGRNs with a positive attitude do not add to the workloads of others, but help the team to be efficient in meeting patient needs. Being flexible and adaptive also enhances an individual's capacity for empathy and person-centred care; each are necessary to meet the needs of clients and staff.

Personal readiness includes being empathetic, kind, caring and compassionate. HCPs suggested that these qualities foster person-centred care, effective communication and relationships. Being person centred is about the quality of the NGRN's relationship with patients and their healthcare colleagues:

> *Somebody who understands that delivering a person-centred care is not just about looking after your patients, but also looking after people on their team.* [C4: P10N]

These NGRNs offer help and look after those they interact with in the healthcare environment. This makes them valuable team members. Being caring, empathetic and compassionate facilitates acceptance and tolerance of the opinions of others. Empathy enables NGRNs to understand others and provide a safe standard of care that meets their needs. Coupled with being flexible and adaptive, this helps to embrace diversity and cultivate inclusive practice: *'you're seeing people who are very different, and understanding how to engage those people'* [C4: P3N]. A positive attitude that encompasses the capabilities discussed, strengthens an individual's psychosocial skills, which HCPs in this study identified as essential for practice readiness.

Psychosocial skills: HCPs described certain psychosocial skills as fundamental to a NGRN being practice ready and able to perform competently as a RN. These skills include the capability to communicate, socialise and interact respectfully and effectively with others. Well-developed psychosocial skills foster productive relationships and support NGRNs to relate, collaborate, negotiate and integrate successfully to provide a safe standard of care:

> *I think good communication skills because that is pivotal in everything we deal with in healthcare, whether you're a doctor, a cleaner or anyone; you have to have those good communication skills.* [C4: P5N]

NGRNs are expected to interact with a range of different people in the workplace for varied reasons. Well-developed psychosocial skills enable NGRNs to interact effectively with others to ask questions, raise concerns and convey information clearly in a way that information is received, understood and things get done. Being able to cooperate effectively with others, hold difficult conversations, negotiate and resolve conflict relies on effective communication. Effective communicators are respectful, approachable and assertive or confident in how they interact with others. These behaviours cultivate relationships that support NGRNs to learn and, importantly, keep patients safe from harm. HCPs described being able to assess, identify and escalate, as critical for patient safety. This requires NGRNs to listen, question, ask for help and convey concerns clearly:

> *Communication is everything … that's why we miss things, that's why we harm people. A lot of the time it's because communication fails.* [C3: P1N]

Being effective team members relies on having a sound set of psychosocial skills. The ability to communicate and interact positively builds rapport with colleagues and contributes to a NGRN's ability to manage relationships, socially integrate and become an effective team member. NGRNs that are effective team members report and refer patient information appropriately and are aware of the roles of others in the team and what is happening in the environment. They demonstrate positive interactions and help others when needed. These behaviours foster productive positive relationships and collegial teamwork, which contributes to a safe standard of person-centred healthcare.

With well-developed psychosocial skills, NGRNs apply knowledge to practice and respond effectively to a range of clinical situations. Without these skills, the ability to put knowledge into practice, complete clinical tasks, work in a team and develop as a nurse can be undermined:

> *you might have this wonderful, huge bag of theory, knowledge, skill, but without that communication with that patient or with the healthcare setting or the team, how do you pull them out and put them to practice?* [C4: P12]

If the NGRN has limited psychosocial skills to cope, seek support and share concerns, their confidence weakens. Performance levels can drop and they may continue to lose faith in their ability. The NGRN may make mistakes, struggle with their new role and need constant support. This can lead to high levels of anxiety and stress, sick leave and attrition.

HCPs suggested that resilience and high-quality communication skills help NGRNs overcome the additional challenges associated with living and working in rural and remote locations. The geographic isolation and the depth of cultural diversity within these communities emphasises the need to have the skills to cope with adversity and establish supportive personal and professional relationships:

> *They might need a bit more resilience … they might be a bit more isolated professionally, and as well as might be moving away from their friends or family so that extra support from outside of work as well and inside of work.* [C3: P10AH]

Clinical Readiness

'Clinical readiness' describes the level and scope of clinical capabilities NGRNs require to be practice ready. These capabilities articulate with personal readiness and encompass the knowledge skills and abilities that enable NGRNs to provide a safe standard of clinical care. This includes the ability to ***provide a basic level of nursing care***; ***clinical knowledge that is basic, broad and general*** and ***clinical skills that are basic and fundamental***

Providing a basic level of nursing care: HCPs understand that when NGRNs begin their first year of practice, they are novice or beginner RNs. Therefore, being practice ready means that NGRNs commence practice with the clinical capability to manage a normal patient load and provide a basic level of nursing care with minimal supervision. A basic level of nursing care includes having the clinical knowledge, skills and attributes to attend to a person's activities of daily living (ADL), complete a health assessment, administer medications, do simple dressings, take vital signs, communicate and document care:

> *Skills and the ability to manage in most simple situations, the minimum requirements required to function at a capable level.* [C3: P3N]

> *have they got the basics, and have they got the foundations to go out there and work alone?* [C4: P12N]

Clinical knowledge—basic, broad and general: A basic level of general knowledge that is relevant to all areas of healthcare provides NGRNs with a theoretical understanding of the body and disease processes, infection control and general clinical conditions. Knowledge of anatomy, physiology and pathophysiology is paramount. This scientific knowledge facilitates an understanding of disease processes that can assist in assessing and diagnosing clinical problems. NGRNs need to understand signs and symptoms and manage a range of clinical presentations. HCPs suggested that the level of knowledge NGRNs currently achieve through their undergraduate program is at a good, adequate, acceptable and *'far higher standard than the general nursing population'* [C4: P9N]:

> *I would say that practice readiness is them coming out with basic knowledge, and not necessarily overly skilled in it, but with knowledge of understanding the basics of some things, and why it's relevant to the patient.* [C4: P11N]

Clinical skills—basic and fundamental: Similarly NGRNs require basic, fundamental clinical skills. Clinical skills need to be underpinned with evidence-based knowledge about the skill and its purpose. The clinical skills HCPs identify as necessary include the clinical skills to provide personal care and assist with ADL, assess a client holistically, perform basic dressings, administer medication safely and document accurately:

> *The basics: IV lines, catheter changes, not complex stuff like vacuum dressings or central lines, all that sort of stuff, but pretty much hygiene, observations, all the basic stuff and sort of know the basic limits of obs, when to notify*. [C3: P5N]

Being able to provide a basic level of nursing care requires personal readiness and the clinical skills to assess, plan, implement and evaluate care. With these capabilities, NGRNs provide person-centred care that maintains patient safety. NGRNs need to be able to assess and identify issues, ask for help and escalate concerns. These capabilities are particularly important for recognising and managing a deteriorating patient. At a basic level, HCPs want NGRNs to recognise if something is not normal or not quite right and be able to report this. Measures to escalate concerns rely on a NGRN's personal readiness capabilities to communicate, discuss, seek help and ask questions:

> *Fundamental patient care, and just knowing what's not normal, just what's not normal.* [C1: P3N]

> *Provide basic care, be able to identify deterioration and follow a process to escalate their concerns. I don't expect them to always interpret things correctly. But I expect them to know that something is not right.* [C1: P8N]

> *Just have those assessment skills, I mean you learn it over time.* [C1: P2N]

Medication administration is emphasised as a fundamental capability for its impact on patient safety. Medication administration encompasses NGRNs knowing why they are administering medications and adhering to a safe standard of medication administration. This requires having *'basic clinical knowledge of the main medications'* [C3: P3N] and understanding about drug actions and the effect on disease processes:

> *Having a basic level of competence when it comes to the basics of medication administration, especially safety. You know, really reading those orders and thinking like okay, why am I giving this medication? This is what is ordered, but why am I giving it? Is it the correct dose, is that route possible?* [C1: P8N]

Surprisingly, while there is constant reference to using computers and technology to provide clinical care, only one nurse HCP identified the need for NGRNs to have computer skills as *'everything is on computer now'* [C3: P6N]. This nurse HCP was located at the HCP facility preparing to move to digital service delivery.

Variation in the depth and breadth of clinical readiness for each case was evident. As noted in Chapter 7, the HCP sites varied in size, location and the level of specialisation associated with the HCP facility. Smaller, more isolated or remote HCP facilities such as in C1 [R] and C2 [SOR] sought a greater depth and breadth of clinical capability whereas larger facilities such as C3 [IR] and C4 [LOR] with more specialty areas of practice sought more specific clinical capability. Having a basic level of general clinical capability provides the platform for the NGRN to develop their capability and proficiency as they practice in the RN role. Consolidating and establishing their basic fundamental clinical capabilities takes 3–6 months and is necessary as a foundation to develop more advanced clinical practice.

Clinical readiness relies on personal readiness and the ability to *'pull it all together'* [C1: P3N] and apply knowledge to practice. Professional capabilities of critical thinking and problem solving, time and workload management, like personal capabilities of communication, are particularly important to successfully apply knowledge to practice.

Professional Readiness

'Professional readiness' encompasses the capabilities NGRNs require to work efficiently with healthcare teams and clients to provide care according to the RN standards and codes of practice. This includes being able to ***adhere to professional standards*** and having ***professional integrity and intellectual honesty***; and the capability for ***critical thinking and problem solving*** and ***time, task and resource management***. Demonstrating these capabilities gives the healthcare team confidence that the NGRN is safe and efficient in their clinical practice.

Adhere to professional standards: NGRNs with professional readiness have knowledge of themselves and their professional standards. They understand the responsibilities and expectations of an RN, how they function within in the healthcare team and with clients: '*Understanding what it means to work in the public sector… their code of conduct and their obligations of providing services to the public'* [C3: P8HR]. These NGRNs function effectively, respectfully and responsibly to provide a safe standard of care: '*If you know what your role and responsibilities are, then you are more likely to carry them out effectively'* [C2: P10AH].

A NGRN will demonstrate professional readiness in the standard and efficiency of their clinical practice and their interactions with staff and patients when undertaking their nursing responsibilities. Deeply linked to personal readiness, a NGRN with professional readiness coveys a positive attitude and is honest and respectful to others when they are adhering to their standards of practice. They work with minimal supervision, and 'take the lead' in making decisions about patient care. The efficacy of their clinical practice demonstrates integrity and intellectual honesty.

Professional integrity and intellectual honesty: NGRNs with professional readiness understand what it means to be accountable and responsible, in that they complete their allocated workload and do not rely on others to do their work or take the blame for any aspect of their work. They accept responsibility for outcomes of their clinical practice:

> *Professional? An individual, who accepts responsibility … when I say accept, that comes with an understanding of responsibility and ramifications and associations with that responsibility—and having the ability to communicate and accept that responsibility.* [C1: P3N]

Being responsible involves knowing an RN's scope of practice and the importance of this to patient and staff safety. Therefore, the NGRN knows the boundaries of their clinical practice and recognises their limitations. They have the '*intellectual honesty*' to acknowledge their limitations, and say *'I do not know something'* [C1: P5M]. A NGRN with intellectual honesty does not work beyond their limitations; more so they acknowledge them, ask questions and seek clarification when unsure:

> *They should be asking lots of questions all the time... It means that they're thinking and they're not stepping out of their scope of practice.* [C2: P8N]

As novice RNs, HCPs expect and prefer NGRNs to ask *'a million questions'* [C2: P11N]. HCPs know this supports their learning and enhances their ability to think independently. This helps NGRNs avoid mistakes and detrimental outcomes for patients, staff and themselves. Knowing when, how and what to ask is pertinent to a safe standard of care:

> *Knowing yourself, knowing when you're like, 'You know what? I don't know enough about that to deal with it', or 'I've got this, I can deal with this'. Knowing the limitations of your practice is really important* [for patient safety]. [C3: P1N]

Asking lots of questions also demonstrates that NGRNs are reflecting on their practice, a capability that enhances professional integrity. NGRNs who are reflective undertake honest self-assessment of their abilities and their contributions to care:

> *That being able to self-reflect and look at how you dealt with something … stop and go, 'okay, why did that happen? What could have been done differently?'.* [C2: P1N]

Reflective practice promotes self-awareness and careful consideration of one's performance. This helps NGRNs recognise how they respond to situations, their performance level and limitations and the need to seek opportunities to improve practice. Reflective practice enhances professional integrity and, like questioning, cultivates critical thinking and effective time management.

Critical thinking and time management: Critical thinking and time management capabilities are professional capabilities that are essential for NGRNs to perform competently in all aspects of their professional RN role. These capabilities contribute to independent practice, decision making, prioritising and delegating workloads, seeking resources, teamwork, taking the lead and providing safe efficient care.

Critical thinking is essential to put knowledge into practice. Critical thinking involves *'digging that theoretical stuff back out of your brain'* [C2: P5N] and reflecting, questioning, analysing and interpreting data. Some HCPs aligned critical thinking with *'having common sense'* [C3: P3N]. A person with common sense is sensible and aware of limitations, thinks logically and critically, and works within their scope of practice to make rational, informed decisions. Critical thinking is necessary to plan, problem solve and apply the clinical reasoning cycle to make decisions:

> *That critical thinking because that critical thinking to me impacts everything. Like critical thinking impacts your time management, critical thinking impacts your plan of care, critical thinking impacts your prioritization, it's just everything.* [C1: P9N]

A NGRN with critical thinking capability manages their work appropriately, is resourceful, draws on knowledge to interpret data and link concepts to practice to plan care and resolve clinical issues. NGRNs that engage in critical thinking ask questions, consider alternatives or *'look outside the square'* [C2: P5N] and seek information in managing their professional responsibilities. They are '*self-thinkers*' who are independent and '*not caught up in the herd*' [C2: P1N]. These NGRNs prepare and think of solutions before seeking clarification:

> *if there is something new, they printed off the policy, they have a bit of an idea of what they're doing before they step in and ask you some sort of clarification.* [C3: P5N]

Critical thinking, however, is a capability that most HCPs indicated many NGRNs lack when they commence practice and one that requires time, experience and practice to develop. NGRNs need to build their confidence in critical thinking and this takes time. These conclusions stem from challenges NGRNs have in applying their pre-registration knowledge to practice and the support required to foster this capability:

> *A lot of them come out and they really do know their theory, they've got the knowledge. They just don't have the ability to transfer that knowledge necessarily into a real-life situation … I see it as our job in the workplace to give them that confidence and that competence.* [C1: P8N]

Time, task and resource management: NGRNs need to be organised and able to prioritise workloads. A basic level of organisational skills is essential for safe efficient care, particularly in current healthcare environments that are characterised by unpredictable change and

fluctuating workloads. Planning and being able to prioritise work maintains an orderly approach to workload management to ensure all clinical care is completed and nothing is missed, particularly in peak periods of high demand and rapid change:

> *I think that's just planning and knowing that at the beginning of my shift, if I write my plan, I do all my charts, I have my plan for the day. If everything goes upside-down then my plan is there and somebody can come along and help me work.* [C2: P2N]

When NGRNs manage their time, task and resources effectively, they are better able to cope and manage their responsibilities in demanding stressful situations: '*when the physical environment is somewhat chaotic, you need to be organized'* [C2: P7M]. NGRNs with good time management work more efficiently and with a level of independence that does not increase the workload of healthcare teams. They are able to adjust workload and offer help to others, making them valuable respected team members. Effective time management relies on personal readiness capabilities, particularly being resilient, flexible and adaptive, and knowing when and how to access resources including support people. This relies on a sound level of industry knowledge to navigate the workplace environment successfully.

Industry Readiness

'Industry readiness' refers to NGRN's capability to effectively navigate the 'industry' in which they work as a RN. NGRNs need to ***know the Australian healthcare system and organisations***, and healthcare parameters and resources necessary for the provision of healthcare. They need to '*understand the system they're going into'* [C3: P8HR], ***adhere to industry and organisational regulations*** and ***acquire organisational knowledge for clinical practice***. Industry readiness is essential to function responsibly, safely and effectively as a member of the healthcare workforce.

Know the Australian healthcare system and organizations: HCPs suggested NGRNs know the regulations that govern healthcare and the relevant award, responsibilities and expectations of RNs working within healthcare. This includes an understanding of the realities of healthcare: the pace and complexity, shift work, clients and healthcare professionals with whom they will work:

> *When a grad walks into a hospital and has a basic understanding of a hospital function … this is how a shift runs, this is sort of the things that I could expect to have to complete during my day … and from a broader context it's actually the healthcare*

system in itself … it's about coming in, ready to work and expecting that it's a 24-hour 7 days a week workforce. [C1: P9N]

When NGRNs commence practice, learning and managing their new responsibilities in an unfamiliar environment can be stressful and overwhelming. Accessing resources and support to assist in providing care and working independently can be difficult. This is more so when faced with a number of different systems and constant rotations to new environments. Understanding how healthcare systems work and operating within them takes time:

In the first few weeks as a grad nurse you go through all your orientation processing, you learn Hibiscus, and you learn labelling, and you learn computers, and you learn all of the systems, which then by the end of the 2 weeks all meld into one …. So those are the things I find that grad nurses struggle with. [C4: P12N]

Adhere to industry and organisation regulations: Knowing the HHS and HCP facility in which they will be employed helps to ease some of these stressors. NGRNs who are orientated and aware of the work environment are better prepared and consequently perform better when they commence practice. A NGRN with this knowledge is acquainted with the organisational regulations and their context of practice. They know the layout of the environment, where and how to access resources and information, including who to go to for help. This knowledge supports NGRNs to be efficient and independent in managing their responsibilities. This is important when healthcare demand is high and senior staff are preoccupied or unavailable.

Knowledge of the location, size and local community of HCP facility where they are employed is important. This was accentuated for the NGRNs employed in remote areas in this study. The geographic location can pose additional challenges for NGRNs. Having prior knowledge and *'some idea of what they sign up for'* [C1: P6M] helps NGRNs to adapt to and better manage these circumstances:

Have an idea of the size of the facility and that it is a rural facility or an outer regional facility, and that the resources and things are different … the expectations of registered nurses are different to metropolitan hospitals. Because when that MET call goes, we don't have a MET team, one person from every ward, usually who's closest to the door, goes to that MET call. So that might be the grad nurse. [C2: P2N]

Acquire organisational knowledge for clinical practice: Industry readiness also encompasses being prepared for the reality of nursing: that is, knowing the expectations and requirements of the RN role within the healthcare system and team. HCPs explained that NGRNs struggle with managing their work amid the high demand, pace and complexity of healthcare:

> *I don't think that they are sufficiently prepared mentally for the joys of nursing in regards to patient types, time management, shift work. I think that throws them into turmoil. They're not used to it. And the fact that it's a 24/7 job*. [C4: P1N]

NGRNs find adjusting to shift work particularly challenging and need time to adapt personally and professionally. Being able to manage the impact of shift work is described as knowing what it feels like and how to cope with the personal demand. HCPs felt that poor comprehension of the impact leads to sick leave and tiredness, which commonly occurs in the first 3–6 months of NGRNs' first year of practice:

> *We do see little patterns of sick leaves and stuff and it's usually in that first 4 months, but that's them trying to get over the tiredness, not being prepared with shift work, because they're not exposed to shift work appropriately*. [C4: P8N]

Some HCPs suggested introducing UGNs to shift work during their clinical placement experiences as a way to prepare NGRNs for what it 'feels' like, and what to expect, to improve their ability to manage the impact and outcomes:

> *I think they really need to get that whole feel of actually what, say, shift work is. So, throw them onto nights, throw them onto the afternoons. That late, early…* [C4: P13N]

Knowing that nursing work can be physically, emotionally and intellectually draining raises awareness of what to expect when they commence practice. This can help alleviate the anxieties and insecurities a NGRN can have about working that often exacerbates the stress associated with transition: '*When you know it's going to be busy, you're prepared, and then it's not a shock, that much of a shock'* [C3: P7N]. HCPs suggested that NGRNs with experience as a paid healthcare employee or a final 6-week consolidated placement at their employing HCP facility have a better understanding of this reality of working in healthcare and what to expect. They have been exposed to the pressures of working within a healthcare team in a dynamic environment. These NGRNs commence practice more prepared for the reality of nursing and the need to be able manage the workplace dynamism. Consequently,

they adapt more readily. HCPs suggested, however, that knowing about the actual role of the RN requires experience and practice in the role. This reality is learned on the job when the NGRN commences practice as a RN:

> *I mean, that's something that's learned. You learn that... as a grad nurse, you didn't get the whole idea of how the holistic picture worked … you don't know that until you go there*. [C2: P8N]

7.2.2 Confidence Underpins Performance

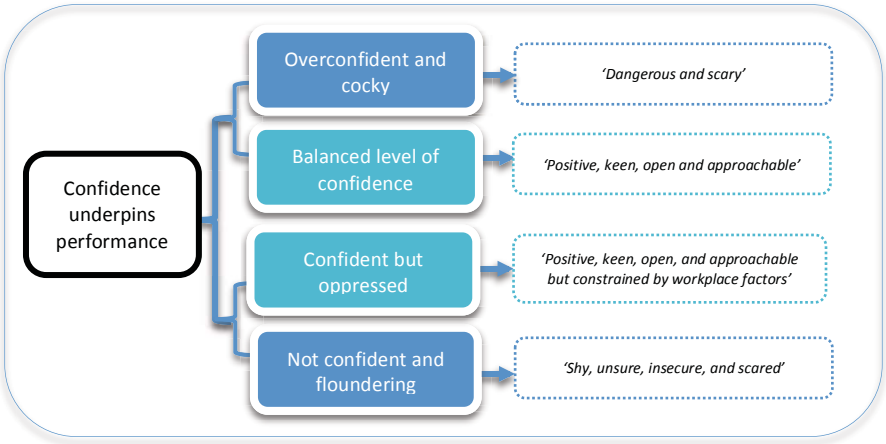
'Confidence underpins performance' describes the level of confidence NGRNs require to competently manage and fulfil their RN responsibilities. NGRNs require confidence to interact with others, ask questions, seek help and voice limitations, clarify practice and escalate problems to avoid preventable errors. Confident NGRNs make decisions and respond effectively in different situations. Conveying confidence in their clinical practice makes patients feel secure and comfortable and keeps patients safe from harm. Being confident in what they are doing enables a NGRN to put theory into practice and report patients' progress. Being confident helps NGRNs to manage practice challenges related to workload or other staff, raise concerns with the team leader and deal with conflict:

> *A chest pain or a potentially violent client or anything like that, they won't have the confidence to continue that process; they'll just, sort of, stop. With a deteriorating patient, the patient would deteriorate more and possibly die and the conflict area, if they can't resolve that very quickly, then they're in danger and the other staff members or clients are in danger … their communication, having that confidence to disregard the irrelevant and focus on the relevant.* [C1: P4N]

A NGRN's level of confidence reflects their self-efficacy about being a nurse and shapes their proficiency in practice. The confidence a NGRN conveys in practice informs the level of trust HCPs have in a NGRN's performance and consequently the monitoring and support provided. HCPs suggest NGRNs need *a balanced level of confidence* for practice readiness but find that when a NGRN commences practice they demonstrate different levels of confidence (Figure 15) that range from being *confident but oppressed* by factors in the environment or being *overconfident and cocky* or *not confident and floundering:*

Sometimes they come out and they think they know everything and they don't know really enough yet and sometimes they come out and they're really insecure about what they're doing. [C4: P13N]

Figure 15: Confidence underpins performance – different levels of confidence



Overconfident and cocky

An overconfident NGRN is one whose confidence outstrips their competence and who believes they know more than they do. They are often labelled as 'cocky' because their attitude indicates that they *'think they know everything'* [C3: P4N] and that they do not need or ask for help. These NGRNs can be difficult to support as they do not ask questions, accept help or readily take feedback and direction:

I think that's why sometimes the over cocky ones get worse because they're harder to assist with that attitude. It's hard and when we keep saying 'Are you okay?'; 'Yes'; 'Do you need help?'; 'No', but you know that they're behind schedule. It's very hard to help them. [C4: P11N]

Overconfident NGRNs raise safety concerns for HCPs. They are considered dangerous because they will practice often outside their limitations, which could lead them to making mistakes or omitting care that could place patients in danger. Consequently, HCPs scrutinise their performance more often and carefully. These NGRNs are '*on the watch list*' [C4: P6N] and '*watched like a hawk*' [C4: P10N], which can create more work for staff. HCPs explained that it is important for patient safety to determine if these NGRNs do know what they are doing, or lack insight and capability and are overcompensating to hide their insecurity, fear or incompetence:

> *When someone's being cocky, either two things, they either know what they're doing and they know it, or they don't know what they're doing and they're covering it up … They are being that overconfident—there is a difference between being confident and overconfident, and hiding something as you do it.* [C4: P4N]

Not confident and floundering

NGRNs who are not confident are also closely monitored. NGRNs who are not confident are insecure, scared and fearful, sometimes shy or reserved and often second-guess themselves:

> *The skills, the competency, it will be very minimal. They've got no confidence, they've got minimal skills, their competence is not that great. So thy will be watching, they will be observing, they will be scared to do so many things.* [C1: P7N]

A lack of confidence can inhibit a NGRN's ability to put knowledge into practice, communicate and seek help. This could leave these NGRNs isolated without support and struggling to provide care; they flounder. If not addressed, patient care can be compromised or these NGRNs can have negative experiences of nursing that lead to attrition. These NGRNs sometimes lack the psychosocial skills to support their progress and can be intimidated by their new situation. A number of factors can influence a NGRN's confidence including their knowledge of the workplace environment, personality and understanding the expectations of their performance:

> *Some of them are so frightened … Sometimes they're frightened to ask questions, sometimes they have a horrible belief that they're supposed to know everything … Crippling, and it stops them owning up, admitting mistakes and it stops them asking questions.* [C2: P11N]

HCPs find, however, that NGRNs who are not confident are more open to receiving support and therefore it is easier to help build their confidence and capability:

> *The ones with no confidence can be a lot easier to work with; you just build them up, That's not hard, we like to do that with education.* [C1: P4N]

Confident but oppressed

Sometimes the workplace can oppress and erode a NGRN's confidence. As described in Chapter 6 NGRNs can enter the workplace with the required capability and confidence, but

may be intimidated or oppressed by negative interactions in the workplace. Negative interactions are a key factor undermining a NGRN's confidence. NGRNs' perceptions of the hierarchy of healthcare professionals can influence their confidence, particularly when it comes to being able to communicate concerns, ask questions and escalate problems. This is important for patient advocacy and safety:

> *It's their confidence to escalate to people that historically … people being afraid of the doctor because that's the doctor. It's the perceived hierarchy that they're worried about … if I'm not getting an answer here, and I'm not happy, then I'm going to escalate to here and have the confidence in the grounding of the knowledge of why they're doing it.* [C3: P3N]

Being able to work with the organisational hierarchy for patient safety is something that some HCPs suggested university graduates are well prepared for and manage effectively:

> *The uni-trained grads … their ability to see medical staff as peers and have no fear whatsoever; they consider themselves equals, which is awesome. Because your authority gradient affects your assertiveness when you're standing up for patient safety, because that's what we're all about, isn't it, patient safety and advocating for our people that are compromised.* [C2: P11N]

A balanced level of confidence

HCPs indicated that a practice-ready NGRN has a balanced level of confidence that enables them to competently manage their RN responsibilities. NGRNs with a balanced level of confidence are '*comfortable in their own skin'* [C3: P13N] and have a level of certainty in their ability to do the job. This is a confidence where they are neither overconfident nor paralysed by fear and second-guessing themselves all the time; they are '*middle-of-the-road confident'* [C3: P5N]:

> *where you're not overconfident but not so nervous you can't function either, you can't manage your time. You have to kind of balance that.* [C3: P1N]

Acquiring this level of confidence takes 3–6 months of practice and experience. When NGRNs have a balanced level of confidence, they are self-directed and have a level of independent and autonomous practice, where they take the lead in managing their responsibilities. These NGRNs are more likely to ask questions and communicate concerns

without feeling insecure or intimidated. Hence, they will not take risks and compromise either themselves or their patients when providing care. They ask questions for validation of performance rather than for direction on what to do. This level of confidence leads to efficient, safe practice. HCPs have confidence in their capabilities and trust that they will seek support if needed. These NGRNs require minimal supervision and are often delegated more responsibility, which builds their confidence further. These NGRNs demonstrate enthusiasm for their new situation and embrace opportunities to learn. Consequently, they attract positive interactions and support:

> *A balance, definitely. They need to be confident that they can do their clinical role. That they can communicate at an appropriate level for their patient's safety and for their wellbeing themselves. And they need to be confident that they know the policy and they will stick to that, they will stick to their scope. But you don't want them too confident that they're going to go outside of their scope or they're going to be dangerous. And you don't want them under confident because then they're not going to do anything, they're just going to hide in the corner.* [C1: P4N]

In all cases, HCPs described the reasons for identifying certain capabilities for practice readiness. Findings reveal five common goals that HCPs aim to meet with NGRNs having the multidimensional capabilities and level of confidence described in this chapter:

1. *Maintain a safe standard of care:* A primary motive for seeking certain capabilities for practice readiness was to ensure safe standards of care. Participants wanted to ensure patients were kept safe from harm and received the required standard of care.
2. *Manage responsibilities in capricious healthcare environments:* Healthcare environments are complex and unpredictable characterised by constant change. Participants explained that NGRNs needed to be able to adapt to change and manage their responsibilities with minimal supervision.
3. *Being organised and time efficient:* The ability to manage responsibilities in dynamic healthcare environments and maintain a safe standard of care relies on having good time management and critical thinking skills.
4. *A need to care and be caring:* Caring was identified as a core quality of a being a nurse and nursing practice. Caring about being a nurse, for patients and colleagues, builds rapport and facilitates support, collaboration and individualised, safe standards of care.

5. *Manage varied clinical situations:* NGRNs are responsible for a variety of clients and clinical situations in different settings. NGRNs need to be able to provide healthcare and establish a foundational level to develop more specialised, advanced skills.
6. *Awareness of diversity:* Participants in this study highlighted the diversity of healthcare consumers and the staff with which they work. NGRNs need to understand and work with diversity to meeting client needs and create positive, respectful workplaces.

7.3 Chapter Summary

This chapter explored how HCPs define practice readiness for NGRNs and described the multidimensional capabilities that form the basis of their definitions. These descriptions reveal that NGRNs need to be prepared with the capabilities to function safely, efficiently and effectively in capricious and complex healthcare systems. NGRNs require personal, professional, clinical and industry capabilities that together compromise practice readiness. These multidimensional capabilities enable NGRNs to simultaneously manage workplace demands and the responsibilities of a RN. HCPs' perceptions reveal that a NGRN's personal readiness and a balanced level of confidence is essential to competently fulfil their RN responsibilities. In the following chapter, ***Category 3: Determining practice readiness***—how HCPs determine a NGRN's practice readiness and the outcomes of these decisions—is discussed.

Chapter 8: Determining Practice Readiness

8.1 Introduction

The aim of this study was to describe NGRN practice readiness from the perspective of Australian HCPs and explain the process by which a NGRN is determined to be practice ready. In Chapter 7 the multidimensional capabilities that HCPs identified as NGRN practice readiness were presented. This chapter discusses findings related to ***Category 3: Determining practice readiness*** as highlighted in Table 24, which explains the processes that the HCPs used to assess and determine a NGRN to be practice ready, and the outcomes of these decisions. As in the preceding chapter, the most illustrative participant quotes are used to reinforce the points being made.

Table 24: Major categories and subcategories—Determining practice readiness

Major category	Subcategory
Dominance of context	• *Healthcare system and environment* • *People and the quality of workplace interactions*
Defining practice readiness	• *Multidimensional readiness* • *Confidence underpins performance*
Determining practice readiness	• *The assessment continuum* • *Assessment outcomes*
Developing practice readiness	• *Transition continuum* • *Right environment to flourish*

8.2 Determining Practice Readiness

Determining practice readiness describes the processes and outcomes of assessments HCPs in this study used to determine a NGRN's practice readiness. Findings demonstrate that assessments of practice readiness are subjective, informal processes and that assessment outcomes inform the level of support NGRNs receive in the healthcare environment. Findings also demonstrate that NGRNs commence practice with different levels of practice readiness and require different levels of support to become practice ready. HCPs' decisions about a NGRN's practice readiness are an important influence on a NGRN's development and progress during their first year of practice. Ensuring assessments are an accurate

representation of a NGRN's performance is central to NGRNs developing practice readiness and experiencing successful transitions to practice. These findings are discussed in two subcategories: *The assessment continuum* and *Assessment outcomes.*

8.2.1 The Assessment Continuum

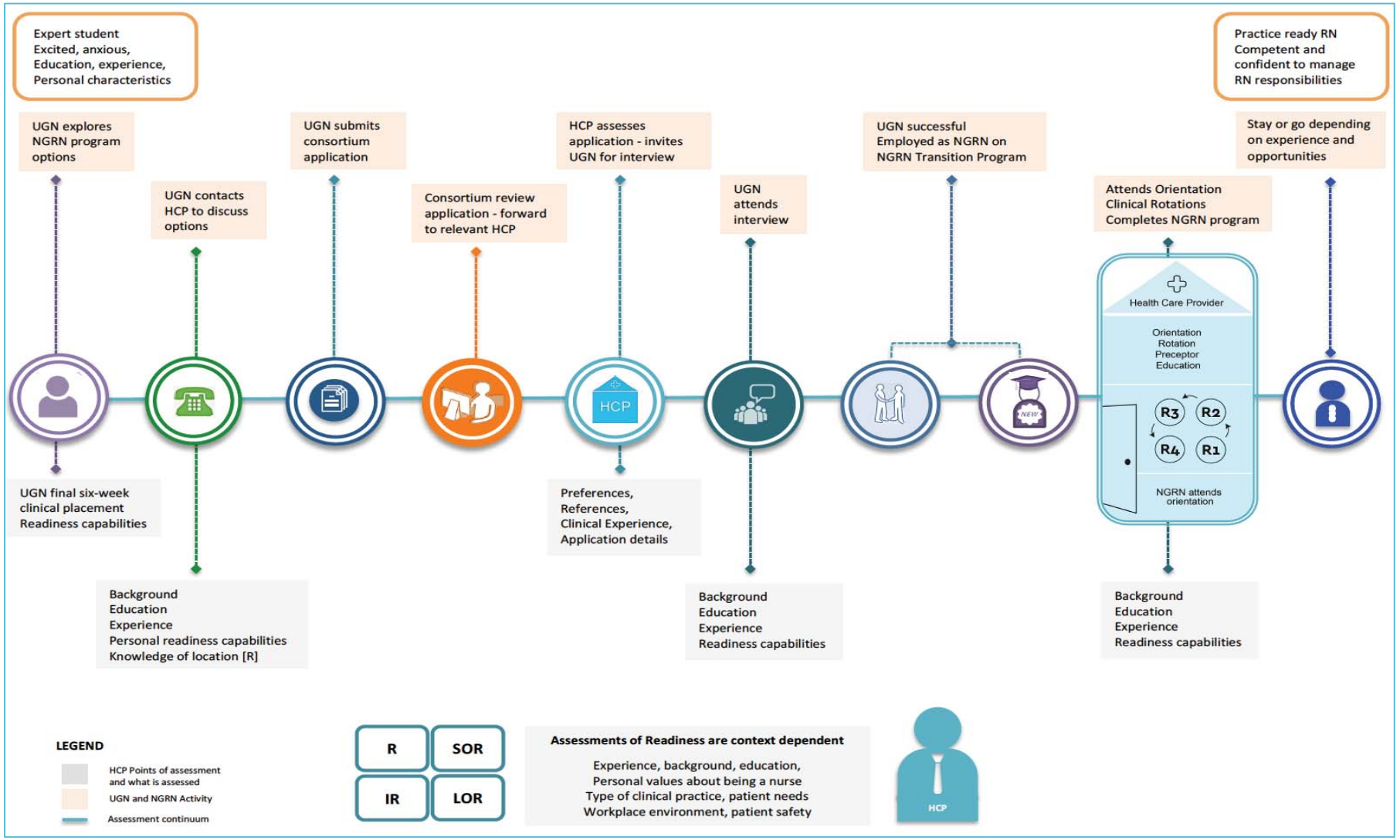
'The assessment continuum' describes the multiple sources, methods and processes HCPs use to assess and gather evidence to determine a NGRN's practice readiness. In all cases, how HCPs determined practice readiness was similar. Assessments for practice readiness began prior to a NGRN's entry to the workplace and continued throughout their first year of practice. Assessments relied on interactions occurring between the HCP professionals and facilities and NGRN, and/or an artefact pertaining to the NGRN such as an employment application or performance review. During assessments, HCPs looked for characteristics in a NGRN's performance that indicated practice readiness and, based on this information, determined a NGRN's level of readiness. The characteristics HCPs sought were primarily based on their experience of working in healthcare and perceived to be necessary to work in healthcare environments, rather than any formal standards or criteria. Figure 16 displays the assessment continuum, the processes and types of assessments involved and the factors influencing the assessment process and HCPs' decisions:

> *I don't think there's that criteria and that's again a very individual* [thing], *like my values and beliefs impacting on what I think is ready, is a ready grad because there's some people I work with who probably wouldn't care about communication and stuff as such; they'd want the textbooks, like they want their anatomy and physiology and things like that. I guess there isn't a criteria, I guess it is individual.* [C4: P5N]

Assessment Prior to Employment

Assessments for practice readiness began when a third year UGN sought employment as a NGRN with a HCP (facility). In Australia, the majority of NGRNs are employed into a RN position as part of a 12-month graduate nurse transition program (GNTP). This is commonly a structured program designed to consolidate a new nurse's pre-registration education. Recruitment for these positions begins 6 months prior to the year the program commences, via a consortium process run by the health department of each state or territory. Each consortium has specific criteria that NGRNs must meet to be eligible to apply.

Figure 16: The assessment continuum—Processes, sources and types of assessment of NGRNs for evidence of practice readiness



In Queensland, where the cases in this study were located, recruitment for NGRN positions occurs between July and August for the subsequent year. UGNs apply online via the QG Graduate Portal (QG, 2018). When submitting their application, the UGN must include a curriculum vitae, university transcript and graduate summary that details their clinical placements and work preferences. On the application, the UGN can identify up to two HHSs, three preferred healthcare HC facilities and three clinical area preferences (QG, 2018).

Prior to submitting their personal choices, UGNs are advised to research their preferences to ensure the HCP facility can meet these choices. In these instances, UGNs contact the HCP facility via telephone and typically speak with the nursing HCP who coordinates the GNTP or manages the HCP facility's recruitment processes. This is often the first point of assessment for practice readiness. While an informal assessment, this interaction generates specific evidence about the UGN's personality, communication skills, confidence and knowledge of the HCP facility and its location. This initial interaction is used to determine the UGN's knowledge of the HCP facility, geographic location and potential challenges they may experience. These conversations are particularly important for HCPs located in rural and remote locations, who use them to also determine an UGN's commitment to rural and remote nursing. NGRNs who have an understanding of the constraints of living and working in rural or remote locations better adapt to and manage rural and remote practice. This initial interaction also provides the opportunity to explain and prepare UGNs for the experience to avoid later attrition:

> *We don't accept anyone that sounds like they're a bit concerned about coming up here … that's setting them up to fail and we don't want to do that without them even starting yet. So, we make sure that they've had a good look at it first, asked them a few questions, asked if they want to ask questions and this is all before the interview process.* [C1: P4N]

Following submission and processing of an UGN's application through the consortium, the application is forwarded to the HCP facility that the UGN identified in their preference list. HCP professionals assess the application with a focus on the UGN's background and work or clinical placement experiences to seek UGNs whose experiences align with their needs and/or demonstrate good clinical outcomes:

> *It often depends on their background and their previous work history … I really look at their previous clinical placement, and what sort of experience they've had with clinical placement.* [C2: P5N]

Assessment at Interview

If successful in the application process, the UGN is invited to attend an interview. During interviews, HCPs observe an UGN's behaviours and review verbal responses to interview questions for evidence of practice readiness. Here, HCPs focus on the UGN's communication and clinical knowledge, and how they respond to and make decisions in difficult situations. This provides information about an UGN's ability to talk and work with people, their critical thinking and how they might prioritise workloads and manage stress:

> *Well, how did they compose themselves through the interview? Were they stressed? Okay, if they're stressed in an interview, are they going to be stressed in a clinical situation or are they going to be stressed when they're out bush by themselves or the other nurse is down the other end of the ward and they're trying to deal with a, you know, deteriorating patient or a family?* [C1: P4N]

UGNs are also assessed for their personal qualities and values during interviews. Personal qualities are considered important for nursing, working in teams and a clinical specialty. Ensuring a person has the right values and fits with the team is important for standards of patient care and workplace culture:

> *That's why at interview I'm really more … looking for values and attributes, because if I get more of a traction with people with those values, I can make a greater difference to patients, to the care at the bedside … I go for what feels right … And you can ask questions in a certain way, so I do tend to ask value-driven questions.* [C4: P10N]

Discussion following interviews enables HCPs on the interview panel to discuss outcomes and clarify the qualities and capabilities panel members identify in the interviewee. As personal opinions can influence outcomes, this helped HCPs retain objectivity in decisions:

> *At the end of each interview session, the panel will have a discussion and that's where some of those personal opinions may come out … some will say, 'Oh, I just didn't like that person'. It happens. But they can be discussed among the interview panel.* [C1: P1HR]

HR professionals explained that their focus in interviews was on assessing an UGN's personal and non-clinical or non-technical capabilities, leaving clinical staff to focus on assessing clinical capability. Clarifying this was more in line with their expertise. HR participants believed this contributed to a more precise, holistic assessment of a NGRN's capability. Their participation helped to determine specific personal qualities and capabilities for *'organisational fit'* [C1: P1HR] so that NGRNs could be placed in clinical areas better suited to their personal disposition and ability:

> *I think they've got to look at the holistic thing. I think there's a lot more to a good nurse then just having a good clinical skillset. There's a whole range of other things that maybe we haven't explored—and I think we're getting better at it now and recognising that.* [C3: P9HR]

Assessment after Employment

If successful at interview, the NGRN is employed into the HCP's GNTP. This is when the most significant and comprehensive assessments of practice readiness occur. While aspects of a NGRN's practice readiness might have been determined prior to this point, the full extent of their practice readiness only becomes evident when the NGRN puts their pre-registration education into practice in the healthcare environment.

During their interactions with NGRNs in the workplace, HCPs continually assess a NGRN's performance to determine their practice readiness. Primary points of assessment occur during organisational orientations and education sessions specifically provided by the HCP for NGRNs and throughout each clinical rotation in NGRNs' first year of practice. The most meaningful assessments of practice readiness occur during the clinical rotation when HCPs work and talk with NGRNs, observe their performance, review their patient outcomes and converse with team members about the NGRN. Here, different aspects of a NGRN's performance are assessed for the capabilities that represent practice readiness. HCPs speak with and observe a NGRN's interactions with patients and staff to determine their communication and critical thinking skills, commitment to learning and nursing, time management and their knowledge and skills for nursing. HCP's observations of how well the NGRN navigates and assimilates professionally and socially in a practice setting are evidence of a NGRN's practice readiness. This gives HCPs an indication of a NGRN's psychosocial skills, particularly communication and their ability to build relationships and work well with others. HCPs identified these capabilities as essential for working in healthcare:

> *She knew—she observed patients and she knew who needs to see the patient. The way how they document, you can also tell whether the person is competent and ready. When they do handovers, I could hear them talking to their colleagues, nurses, by the way, so-and-so, we give this, this is what happened, level is this. They talk and I could tell—I could hear and I could tell that they know what they are doing.* [C1: P10AH]

A NGRN's attributes, personality and confidence are also assessed to determine practice readiness. NGRNs are observed for attributes perceived as necessary for a nurse or nursing and for a particular location, or clinical specialty. Being caring or having the *'innate caring factor'* [C3: P5N] is paramount. Caring was explained as being respectful, empathetic, kind, compassionate, listening and person centred. A NGRN needs to possess these attributes to be a good nurse:

> *You've got to have the empathy to become a nurse, if you don't have empathy you're not going to make it.* [C3: 4PN]

> *Somebody who is the right fit for my team, somebody who has the right values, who is who has their heart in nursing. I'm interested in the heart.* [C4: P10N]

Coupled with having a positive attitude and being enthusiastic and willing to learn, these attributes mean NGRNs can be trusted to provide the appropriate standard of care, are easy to work with and make valuable team members:

> *Attitude is the ability, it's confidence, you can have an attitude of willingness to learn or you can have an attitude I can do it and have no idea. I guess the attitude stems from two things, personality trait and type … But the attitude will dictate your professionalism. What does that mean, attitude? It's communication, and composure, teamwork, respect, trust, values. All of those things.* [C1: P3N]

Having the right personality for a clinical specialty was explained as having particular traits, deposition or aptitude to work as a nurse in a particular environment. Placing a NGRN in a practice setting that suits their personality adds to their ability to assimilate and perform competently. If the NGRN's personality is not well suited to the setting, they can struggle to adapt, may not perform well and give the impression they are not practice ready:

> *Depending on that individual's personality and how they fit into the workplace culture … if that individual has the personality that fits, it works. And staff are more willing, more than willing to go out of their way*. [C1: P9N]

Certain personalities adapt better to certain environments depending on the pace, pressure and model of care. Rural locations and particular clinical settings such as MH, neonatal and ICUs or EDs are key examples of where certain personalities are more suited to the environment:

> *If you're not suited to an intensive care environment, no one will ever flourish if you just genuinely don't like it. I think it's those sorts of things.* [C1: P6M]

A NGRN's level of confidence is also assessed for practice readiness. NGRNs who demonstrate a balanced level of confidence are determined to be more practice ready. A balanced level of confidence is where a NGRN is observed to provide care with minimal supervision, interact effectively with others, escalate concerns and ask for help when required and with ease. These NGRNs work more independently, can make decisions and do not practice beyond their limitations. Consequently, they are trusted by HCPs to follow through on delegated work and maintain patient safety. HCPs are confident in giving these NGRNs responsibility, which conveys respect and further enhances a NGRN's confidence:

> *For the newly qualified registered nurse to come out and work on the floor with a knowledge base—a good knowledge base and her confidence in her own capabilities to be able to work in a ward-based environment looking after patients and working alongside other members of staff.* [C2: P6N]
>
> *It's observing them and listening to them, and finding out what they know, and gauging their confidence too. Are they confident, are they overconfident? Are they gung-ho?* [C2: P2N]

The Influence of Experience

In this study, decisions about practice readiness were predominantly based on HCPs' accumulated experiences of working in healthcare and with NGRNs: *'Lots of work experience. Observing over the years, working with post grads'* [C2: P1N]. These experiences provide tacit and explicit knowledge about the knowledge, skills and attributes NGRNs require to perform competently and successfully in the healthcare environment. Because of the breadth and depth of experience, nurse participants suggested they 'know what they want' and 'just know' through observation, if the NGRN is practice ready or not:

> *It's experience of knowing what I want, being—it's experience and exposure because, I'm 17 years out and I've worked across specialties and I know.* [C1: P3N]

HCPs draw on the knowledge from their experiences as a benchmark to determine if a NGRN has the capabilities they believe make them practice ready. How closely a NGRN's performance aligns with the HCP's beliefs determines a NGRN's level of practice readiness. Consequently, what is 'practice ready' for one HCP could be different to what is considered acceptable and expected for another.

For nurse participants in this study, their education and personal experience as NGRNs inform decisions about practice readiness: *'My ideas; experience, experience as a grad, experience as a student'* [C4: P7N]. These experiences provide insight into the fear and apprehension NGRNs can experience and why NGRNs can become overwhelmed or reticent to seek support. This knowledge helps determine the capabilities NGRNs might require to cope with these experiences and they use these to determine a NGRN's practice readiness:

> *Through my experience of being a grad nurse because I think those are the things I probably may have lacked in a little bit, I think. And so, I think that's probably where I'm like, 'Yeah, if I had those things I might have been ready'.* [C2: P8N]

For medicine, AH and HR participants, their experience of being a new graduate and working with nurses in healthcare environments influences their understanding of the roles and qualities of a nurse. Consequently, they look for these in NGRNs as a measure of practice readiness:

> *It's completely anecdotal and it's completely experience-driven, but I think for me, that's how I would know someone's ready.* [C1: P6M]

> *Where do I get my ideas from for practice readiness? I think from my experience of working on the wards—I think that gives me a good understanding of what nurses have to do on the wards.* [C2: P10AH]

One HR participant in this study had experience as a nurse and used this and her knowledge of HR to inform decisions about a NGRN's practice readiness:

> *It comes from me from having worked in nursing many years ago. So I was an enrolled nurse at the time that the first graduates out of universities were starting to*

> *hit the hospitals. So I am aware that things are quite different now with the amount of practical stuff they do compared to what they did right back all those years ago in the late '80s.* [C3: P8HR]

Comparisons as a Benchmark

Comparisons between NGRNs also inform opinions about practice readiness. Observed differences in performance are used as an indicator of readiness or lack thereof: '*Within a day of watching two grads, I can usually tell who's going to be the one to struggle'* [C4: P11N]. While acknowledging this may not be the most sound decision process—'*it's terrible but you do compare them to the other graduates that you've experienced over the years*' [C1: P8N]—these assessments enable a comparative benchmark to gauge capabilities and performance levels to determine practice readiness:

> *The first grad we had was precise; she was not confused. Comparing her to the other one that we've got now, the other one's confused, very flustered, where the first grad, she could judge the situation and ask for help at the right time.* [C4: P13]

Healthcare and Professional Standards as a Benchmark

Evidence that a NGRN's performance reflects knowledge of healthcare and professional standards of practice is a benchmark to determine practice readiness. HCPs in this study valued the NSQHS standards (ACSQHC, 2012). The NSQHS standards guide clinical practice to maintain safe standards of care and keep patients safe from harm. The HCPs observed NGRNs' practice for evidence that they knew the standards, with the expectation that they should adhere to these as part of being practice ready. The standards frequently identified included *Standard 4 Medication Safety*; *Standard 6 Clinical Handover*; *Standard 9 Recognizing and Responding to Clinical Deterioration in Acute Health Care*; and *Standard 7 Blood and Blood Product*s (ACSQHC, 2012):

> *Understanding the expectation of national standards … having that understanding really makes that transition into the workplace because you already know what's expected as a standard across the country … what you should be putting into action in the workplace.* [C1: P9N]

The competency standards for the RN (NMBA, 2006) and Benner's *Novice to Expert* framework of clinical development also informed assessments (Benner, 1984). The NMBA

competency standards for the RN (NMBA, 2006) were referred to as these were the standards in place at the time of this research (replaced by the *Registered nurse standards for practice*; NMBA, 2016b). The NMBA competency standards (NMBA, 2006) informed the HCP's expectations of a NGRN's professional and clinical standard of practice. Being registered meant that the NGRN had met their undergraduate program requirements and consequently would know and meet the standards as they applied them in practice:

> *I assume that when they leave* [university] *they're fit for task. So, fit for task, so that they can meet the competencies for their registration. I do find that everybody understands the competencies for the registration*. [C4: P10N]

One nurse participant used competency checklists for the clinical area and the NMBA competency standards as a 'mental checklist' to observe and assess a NGRN's performance for evidence of practice readiness:

> *So we have in emergency clinical skills assessment tools that we use … Whenever you're watching someone do something I'm kind of ticking it off in my head. I'm also comparing them to the competency standards for registered nurses. Like this is what is expected that a registered nurse can do, whether they are newly graduated, or whether they've had 20 years' experience.* [C1: P8N]

Medicine, AH and HR HCPs knew standards for RNs existed but may have had little knowledge of the standards: *'able to perform all the functions that your profession requires'* [C2: P12M]. As noted earlier, these HCPs gained their knowledge about the RN role and responsibilities through their experience of working with nurses in healthcare. These HCPs commonly described practice-ready performance levels as competent or *'less than competent'*, equating this to the standard of practice expected after completing a program of study or in comparison to their own profession, *'the medical equivalent of an intern I guess'* [C2: P7M]:

> *I think by and large they're obviously graduating for a reason, they've passed their placements and demonstrated the necessary knowledge and skills through their program to suggest that they're ready to begin work and I think the majority are at that sort of level.* [C3: P10AH]

Other competency checklists used to determine practice readiness were related to those that healthcare facilities used as a measure of a NGRN's performance in the GNTP program or the acquisition of specific skills for clinical practice:

> *I think it helps if you're looking at all the competencies they're required to do in that first 12 months, to see whether they're on track or not. Like, are they just bumbling through their competencies and really having no idea to do it, then possibly they're not ready to be there. But if they're seeming to be nervous and practising, and actually getting through their competencies, then they're usually fairly ready to be there.* [C4: P6N]

Nurse participants used Benner's *Novice to Expert* framework (Benner, 1984) to indicate the level of performance expected of NGRNs. Overall, HCPs in this study acknowledged that NGRNs are at the beginning of their learning as a RN and grow progressively competent throughout their first year of practice. The majority of nurses described NGRNs as stage 1 novices or stage 2 advanced beginners or beginners (Benner, 1984):

> *Benner's framework yeah, so it's novice like you're coming in, you don't have that clinical background and you're starting to build that level.* [C4: P7N]

A NGRN can also fluctuate between stages as they move environments or advance in stages as they progress through their graduate year. The NGRN was identified as being a novice in one environment or area of their practice and beginner or competent in others. Nurse HCPs recognised that as NGRNs progressed through their first year of practice they moved to stage 3 competent (Benner, 1984, pp. 25–27):

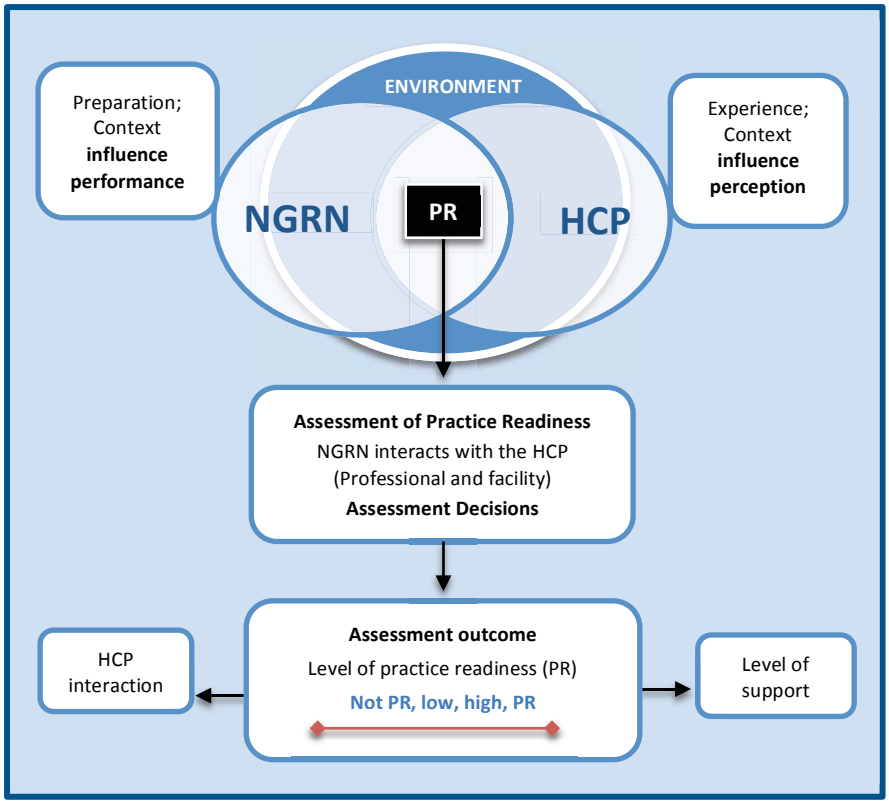
> *Graduates are novices … you know you might move out of that spectrum in some facets, of communication, patient interaction. But you technically might be novice, or you change environment and then you flip back into a novice.* [C1: P3N]

> *A lot of the graduate program we have is the transition from a novice to a competent practitioner … someone who is able to work autonomously to provide patient care with minimal input and support from senior registered nurses.* [C2: P5N]

8.2.2 Assessment Outcomes

'Assessment outcomes' describes the outcomes of HCPs' assessments of practice readiness. The outcomes indicate that NGRNs enter the workplace with variable levels of practice readiness. Given the process and factors influencing assessments, some of this variability might be a result of HCPs' personal beliefs about what is required. Decisions about a NGRN's level of practice readiness based on these assessments regulates how HCPs interact with NGRNs and the level of supervision and support they are provided. Therefore, these decisions can affect how a NGRN is supported and socialises into the organisation and role of a RN. Figure 17 presents the main elements and influences in the process of determining practice readiness and the outcomes of the assessment, which are discussed below.

Figure 17: Determining practice readiness and assessment outcomes



Low Levels of Practice Readiness

A NGRN demonstrating low levels of practice readiness lacks confidence, *'flounders or struggles'* [C3: P1N], and has poor time and workload management. Being overconfident and refusing help also conveys lower levels of practice readiness. Common descriptors illustrating the characteristics of these NGRNs included *'scared'*, *'terrified'*, *'stressed'*, *'nervous'*,

'frightened', 'flappable', 'flustered', 'hesitant', 'intimidated' and *'unsure'*. In the workplace, these NGRNs can be easily overwhelmed and struggle to finish their work on time: *'always running late, like at the end of the shift'* [C4: P11N]. They may have gaps in their clinical practice, appear disorganised, withdrawn or quiet, and reluctant or not open to learning:

> *The nurse that's not ready is the one that, to me, stands back in the crowd, never asks questions, doesn't make a lot of eye contact in case you ask them a question, and won't step forward when there's tasks or things that they can do that's new to them.* [C4: P12N]

NGRNs that are nervous, intimidated or fearful can have difficulty communicating with colleagues and seeking help. These NGRNs might not ask questions or ask too many questions and require constant reassurance, as they are afraid of making mistakes; they *'second-guess themselves all the time'* [C4: P5N]. Their level of knowledge may be reasonable but their ability to apply it in practice is compromised by a lack of confidence or limited critical thinking skills:

> *Sometimes they're novice clinical skills are sound, but they're not attaching it to what's actually happening to the patient, they're not looking at that and going 'Well that's because of this'; the theory's not linking with the practical side of things.* [C4: P11N].

NGRNs displaying low levels of practice readiness receive closer, more intensive one-on-one educational support from nursing HCPs and often require a longer period of support or working in a supernumerary capacity. These NGRNs need additional time to build their confidence to *'get them up to where they should be'* [C4: P4N] but can also be '*frustrating, tiring and time consuming*', particularly if support is ongoing and the NGRN does not listen to feedback: '*she's struggling with getting advice or feedback from anybody*' [C4: P13N]. NGRNs requiring a high level of support and intensive monitoring can monopolise support and increase workloads for preceptors and team members: '*they usually end up monopolising my time or monopolising the support from more than one person around them, usually, as well'* [C4: P6N]. Staff are *'more inclined to check what they're doing, make sure things are done, make sure stuff isn't forgotten'* [C3: P1N]. Coupled with the increased workload, the requirement to constantly watch and direct these NGRNs can alter staff attitudes towards and interactions with the NGRN:

You can see that in the communication back to her. They're very sharp. It's got to the point that they're not even bothering trying to teach her anything because she's not listening. It's mainly not listening. She over talks while they're talking or it's 'I know that already'. [C4: P13N]

If the NGRN's performance level does not improve, the NGRN may be negatively labelled, or ostracised and experience negative interactions that undermine their confidence and performance. Consequently, the workplace environment can become hostile for the NGRN, who may then continue to struggle with their responsibilities, have unfavourable experiences of nursing and leave. Table 25 synthesises the key features of a NGRN with low levels of practice readiness, and the aims and support HCPs offered NGRNs assessed as having a lower level of practice readiness.

Table 25: Low levels of practice readiness, support measures and aims

Low levels of practice readiness	Support measures	Aim
Under confident, scared, unsure and nervous. Hesitant in practice and to ask questions. Poor work and time management, struggles and flounders, often overwhelmed or overconfident and lacking insight and not open to receiving help	• Close, one-on-one relationship with consistent monitoring and checking • More input from experienced or senior staff • These NGRNs were given less responsibility with a progressive approach to building their confidence or reining them in to establish competence • The level of support commonly involved a longer period of time and structured support from educators	Initially, to establish confidence and assist in the application of knowledge learned in practice Progressively, to develop capability, build independence Keep patients safe

High Levels of Practice Readiness

A NGRN demonstrating higher levels of practice readiness successfully navigates the workplace environment and is organised and time efficient. This NGRN manages a normal patient load to competently provide basic nursing care. They are effective communicators and develop relationships easily:

> *easy to work with because they're getting involved, they're getting engaged in what you're doing and wanting to share with them.* [C3: P2N]

They have a positive attitude and are caring, kind and open to learning, which *'helps them to fit in better'* [C4: P11N]. NGRNs with higher levels of practice readiness are reliable, helpful team members who are resourceful in the provision of care. Possessing a high level of personal and professional self-awareness, the NGRN knows the standard and scope of their practice, therefore readily recognises their limitations and knows when and how to escalate issues and ask for help. They 'care', provide care that is person centred and make patient safety a priority. Practice-ready NGRNs adapt well to fluctuating workloads and change, are decisive and able to function with minimal support from colleagues in the workplace. Underpinning their performance is a balanced level of confidence: *'They're confident … not double checking themselves'* [C4: P13N]. As a result, healthcare team members feel confident in the NGRN's ability to complete their work and keep patients safe. Consequently, they are given more freedom, responsibility and opportunities to consolidate and develop their practice:

> *With the one that I can trust, the one that I think that's practice ready, I feel more trust with them, so it's easy to delegate and know that if I've delegated, that will get done, I don't have to follow on.* [C4: P11N].

A NGRN identified as having a higher level of practice readiness does not require intensive one-on-one support and does not add to the workload of the healthcare team or disrupt the workflow. This NGRN is supervised, but not intensely or for prolonged periods: *'just checking in with them in terms of how they're going, versus having to do anything remedial with them'*. [C2: P1N]. HCPs *'stand back and watch from a distance'* [C2: P6N]. These NGRNs are easier to help and guide in their clinical practice as they are '*engaged in what they are doing'* [C3: P2N] and keen to learn. Gaps in performance are evident, but these are minimal and require simple instruction or guidance to adjust, develop and build confidence:

> *They've got the skills and they've got the ability, they just need time to embed it within them and the confidence that they're doing it.* [C3: P3N]

Thus, these NGRNs do not add to staff workloads but support them and staff are happy to coach and guide them to enhance their practice. NGRNs with high levels of practice readiness engender positive, reassuring interactions from staff, are generally liked and assimilate better

into their roles and the environment. Consequently, the workplace is supportive of them, which builds their confidence and competence. Table 26 synthesises the key features of a NGRN with high levels of practice readiness and the aims and support HCPs offer.

Table 26: High levels of practice readiness, support measures and aims

High levels of practice readiness	Support measures	Aim
Confident, positive and enthusiastic individuals, who asked questions, were more independent, self-directed and sought support appropriately	• Monitoring but not closely or constantly: more guiding and coaching • Less input from senior staff • Pushed a little and given more responsibility to extend their capability, such as being allocated higher more complex workloads and leadership roles later in NGRN year	Generally aimed at reaffirming and clarifying, safe independent practice, consolidating, maintaining and building confidence and capability to keep patients safe

How NGRNs are determined to be practice ready reveals the complex and conditional nature of HCPs' needs and expectations of NGRNs when they commence practice. Perspectives, needs and expectations of practice readiness differ depending on HCPs' personal and professional contexts. As a result, despite meeting the professional requisites for practice, NGRNs may not meet the expectations and needs of HCPs across healthcare contexts. NGRNs' first year of practice experiences is reliant on HCPs' decisions about their level of practice readiness. If these are inconsistent and variable, and a NGRN's performance is mediated by conditions in the workplace, the NGRN's transition experiences can be perplexing and unpredictable, regardless of their pre-registration education and preparation.

8.3 Chapter Summary

This chapter described how HCPs determine practice readiness and the factors that inform and influence their decisions. The assessment of readiness is largely an informal process that occurs over a period time as the NGRN enters and interacts with the workplace environment. In this study, decisions about practice readiness were primarily based on HCPs' cumulative experience of working with NGRNs. The outcomes of HCPs' assessments determined the level of support provided to a NGRN to enable them to develop their practice readiness. In the next and final findings chapter, ***Category 4: Developing practice readiness***—the factors that enable NGRNs to develop, demonstrate and enhance practice readiness—is discussed.

Chapter 9: Developing Practice Readiness

9.1 Introduction

Chapter 5 presented the four cases in which HCPs' perceptions of NGRN practice readiness was investigated. Chapter 6 described how factors in the healthcare context influence HCPs' decisions about NGRN practice readiness. Chapter 7 explained how HCPs define practice readiness and Chapter 8 explained how a NGRN is determined to be practice ready. This chapter presents ***Category 4: Developing practice readiness*** (Table 27). This category describes the factors that enable NGRNs to develop, demonstrate and enhance their practice readiness and subsequently create more successful transition experiences. Participant quotes are again used to illustrate and reinforce the points being made.

Table 27: Major categories and subcategories—Developing practice readiness

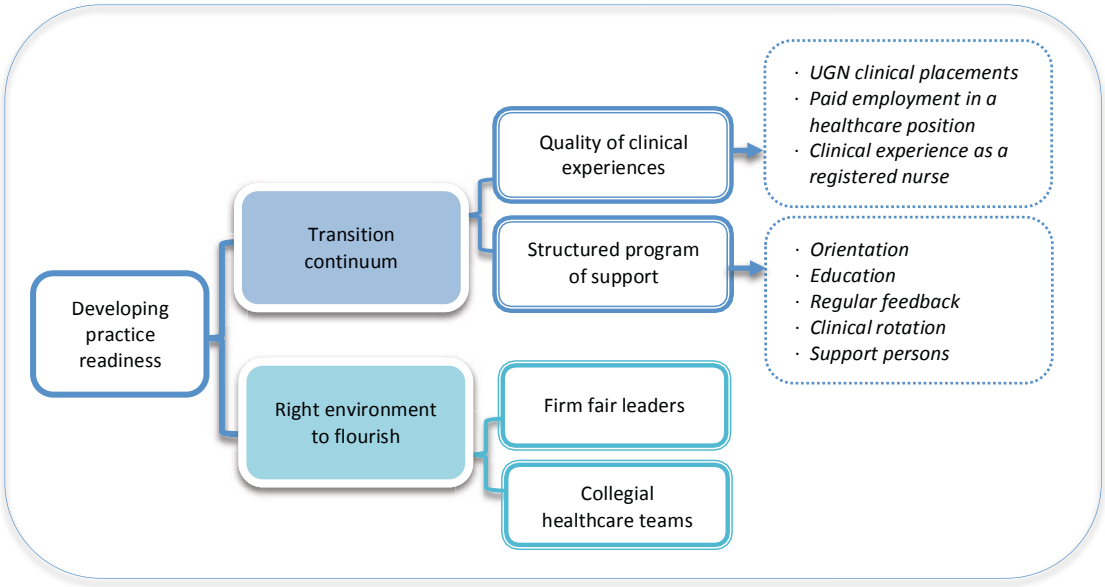
Major category	Subcategory
Dominance of context	• *Healthcare system and environment* • *People and the quality of workplace interactions*
Defining practice readiness	• *Multidimensional readiness* • *Confidence underpins performance*
Determining practice readiness	• *The assessment continuum* • *Assessment outcomes*
Developing practice readiness	• *Transition continuum* • *Right environment to flourish*

9.2 Developing Practice Readiness

Developing practice readiness describes the factors that together enable NGRNs to develop, demonstrate and enhance their readiness for practice and subsequently create more successful transition experiences. Findings indicate that NGRNs develop practice readiness progressively and this is reliant on factors present in a NGRN's pre- and post-registration education and the workplace environment. These factors scaffold and support an individual's development as a nurse from the beginning of their undergraduate nurse education, through to the completion of their first year of practice where the NGRN is immersed in the RN role in

the healthcare context. These findings are discussed in two subcategories, *Transition continuum* and *Right environment to flourish*, and codes as outlined in Figure 18.

Figure 18: Developing Practice Readiness – subcategories and codes



9.2.1 Transition Continuum

Becoming a RN is a transition that begins when an individual commences their nurse education and continues through to the end of a NGRN's first year of practice. This can be described as the 'transition continuum'. This continuum is influenced by a number of factors in the education of RNs that enhance practice readiness and develop NGRNs. These factors include quality clinical experiences in the healthcare setting and 'a structured program of support' during a NGRN's first year of practice. Successful outcomes are reliant on education and healthcare institutions collaborating effectively in the education of nurses. These ideas are discussed within two subcategories of *Quality clinical experiences* and *Structured program of support.*

Quality Clinical Experiences

Clinical experience that provides *'plenty of practice'* [C2: P9N] in the healthcare environment is the foundation for developing practice readiness. According to HCPs, becoming a RN relies on having experiences in healthcare contexts to 'learn on the job'. The healthcare environment provides the context for relevant experiential learning where UGNs and NGRNs learn to merge their education with practice, while working with experienced RNs. UGNs and

NGRNs are exposed to the tacit knowledge and capabilities of experienced RNs—those necessary for clinical practice yet not readily articulated and learned from a textbook in the university setting: *'There's a whole lot of stuff you've got to learn on the job that you can't be ready for'* [C1: P5M]. Because of these workplace experiences, UGNs and NGRNs gain a realistic understanding of the environment, expectations and role of RNs:

> *It puts it all together doesn't it really when you're in prac as you're combining your knowledge and the skills you've been practicing and learning away from the environment.* [C3: P10AH]

Effective clinical experiences are gained through well-designed ***UGN clinical placements***, ***paid employment in a healthcare position*** and supported ***clinical experience as a RN***. All three types of clinical experiences provide relevant clinical practice that cultivates practice readiness to support an individual's transition to becoming a RN:

> *I think their practical experience has a lot to do with it, and I think that plays a big part in how ready they are, in terms of confidence in the knowledge they have, and going forward.* [C3: P1N]

UGN clinical placements: Well-designed UGN clinical placement experiences are essential for developing NGRN practice readiness: *'whether somebody has a good or a not-so-good prac experience will play a big part in how ready they are'* [C3: P1N]. Clinical placement experiences are supported by facilitators and aimed at 'learning' as opposed to 'working'. They are more structured, prescriptive and sheltered, and focus on achieving specified capabilities required for registration as a nurse. Clinical learning at university is important, but having the supported practice in the healthcare environment is essential to apply and merge what is learned in clinical practice to embed the learning:

> *So they definitely have to have that theory but they have to have more of that hands on to make them ready for their grad year.* [C2: P4N]

> *The more experience you can have before you hit the ground running, the better people are prepared for that first year.* [C1: P6M]

Many of the HCPs attributed deficits in a NGRN's practice readiness to a lack of time on clinical placement. HCPs suggested that more exposure to the clinical setting and '*practical time with real patients'* [C4: P12N] would improve practice readiness. UGNs need more

clinical experience to consolidate their learning, learn what is expected of RNs and to build their confidence in working in healthcare environments. HCPs recommended having more regular contact, starting clinical placements early *'from day one of their studies'* [C1: P7N] and having longer consolidated placements periods:

> *I think if they had more experience on the floor through their training program I think it would give them a lot more confidence when they came out on to the floor and a lot more awareness of what's actually expected of them when they do come out on the floor as a graduate nurse.* [C2: P6N]

> *I think maybe one or two shifts a week over at the hospital incorporated with the university degree, so that it's not pressure to learn everything in 2 or 3 weeks. Its gradual learning as it becomes available.* [C4: P12N]

Strengthening the focus and facilitation of UGNs' clinical placement experiences to improve learning outcomes was also recommended to improve practice readiness. Shifting the focus of clinical placement objectives from practising specific competencies to attaining these skills within more holistic episodes of care creates more authentic clinical practice. HCPs suggested that clinical placement experiences that aim to integrate UGNs as reliable members of the healthcare team and engage them more intently with the role of the RN could enhance practice readiness:

> *So they come armed with this list of clinical skills that they have to get ticked off and you find them looking everywhere for this particular clinical skill that they have to get ticked off … they are sort of up on this mezzanine level. When they are just honing in on these skills all the time and they're not participating in the flow of a day from the start of the day to the finish of the day because they're always just darting here and there looking for clinical skills to tick off.* [C2: P13N]

For this reason, a final 6-week UGN clinical placement experience prior to program completion was identified by HCPs as one of the most effective strategies for practice readiness. The length and intensity of this placement allows time for the UGNs to establish themselves as a member of the healthcare team and the opportunity for continuous practice in applying their pre-registration education to clinical practice. This experience enhances their sense of belonging, consolidates their learning and improves their confidence as they *'acclimatise to nursing practice'* [C2: P4N].

Practice readiness is further enhanced if this final placement is in the HCP site and/or clinical area where the NGRN plans to commence their first year of practice. In these instances, staff are more receptive to the NGRN. For the NGRN, familiarity with the workplace and healthcare team augments their transition by giving them more confidence in seeking help and managing their new responsibilities:

> *I guess what I see practically is the immediate attachments of a nurse before their* [NGRN] *position makes a huge difference. The current grad nurse that I'm working with was so lucky that she got her final placement in the position that she's now working in … she knows the people she's working with, she s had weeks and weeks and weeks to work with them to understand what her work role will be, to identify deficiencies that she might have in herself that she might not be confident with and prepare herself and to morph into that role over a period of weeks to months … I think if you were to ask grad nurses whether they found that was helpful, I'd be very surprised if they didn't say, 'I know these people I'm working with. I know how this hospital works. I know what all this is and I'm so much more practice ready because I had a couple of weeks to practice'.* [C2: P12M]

Some HCPs suggested this final consolidation placement is beneficial in preparing NGRNs for specialty areas. The NGRN comes to know the routines and the expected level of practice. This consolidated experience improves their competence and, consequently, their ability to function more effectively and safely as a NGRN in a specialised area of practice:

> *I find them all really competent, I'm normally generally quite impressed, but again these are the ones we've had from students so they've been in ED for 6 weeks before. It makes such a difference; it actually blows your mind … they've had 6 weeks previously of at least getting the routine, know where things are, get an idea of the drugs we generally give.* [C4: P5N]

NGRNs are purposefully recruited and employed in areas where they have had clinical experience. HCPs' familiarity with an NGRN's level of practice gives them more confidence in their capability and ability to fit within their healthcare teams. They know what to expect of these NGRNs, making it easier to work with them and support their development:

> *That is generally who our NUM will hire is students who have excelled or done well during their final placement. It does make that transition easier for them … they have*

been there for 6 weeks so they come back and they know basic things like where the pan room is, where the dressing trolleys are. [C4: P5N]

Participants from the remote case [C1] in particular preferred NGRNs with life or clinical experience in a rural or remote location. This experience cultivates first-hand knowledge of the challenges associated with working and living in geographically isolated locations. As a result, these NGRNs adjust better to the workplace and their transition to a RN:

When you recruit someone who's experienced remote lifestyle, whether they've grown up in it, or they've at least done placement, there's less reality shock, there's less culture shock, they've got an easy transition into the workplace. [C1: P9N]

While the location and length of a UGN's clinical placement may be appropriate, HCPs cautioned that effective clinical facilitation is required if clinical placements are to be successful. UGNs can have difficulties with learning and continue to demonstrate substandard performance during their clinical placement. HCPs advised that staff and facilitators working with UGNs need to have the capability and confidence to cultivate learning, assist struggling students and identify and address issues early. This helps to avoid later problems with NGRNs entering the workforce with performance issues that can exacerbate transition challenges and lead to a need for intensive support from HCPs:

And I guess that comes back to hospitals, having people do preceptor courses and all those sorts of things is important. And I think how prac is structured is very important. [C3: P1N]

I think that we need to put a lot more work into the clinical facilitation of undergraduates to make sure that they feel ready for a career in nursing. [C2: P5N]

HCPs proposed that improving clinical placement experiences could be achieved through more collaboration between and across the education and healthcare sectors. A common challenge HCPs described is that UGNs come from different universities with varied clinical placement requirements, objectives, processes and experiences. Variation stems from different requirements set by both the healthcare industry and universities. This results in diverse and inconsistent clinical experiences, levels of competence and expectations for UGN and for NGRNs when they enter their first year of practice. HCPs suggested that standardising

clinical placement requirements between and across the healthcare and education sectors could help create more uniformity in expectations and learning outcomes for UGNs:

> *What we can do as a workplace to assist graduate readiness is to have some standardisation across placement requirements and placement expectations because everyone expects something different. Some universities don't allow the students to do evening, nights or weekends—other universities do … So each student comes out with a different experience when they're a graduate.* [C1: P9N]

Some HCPs attributed the responsibility for the education of RNs to universities; however, for others there was recognition of the joint responsibility of both universities and the healthcare industry in the preparation of new nurses for practice. In acknowledging this responsibility, more collaboration—not just between the tertiary and healthcare institutions but also across universities and HCPs—was emphasised:

> *I think the tertiary institutions have a big role to play, but I think we as hospitals or facilities have a big role to play in providing good prac … I wonder if there needs to be more of collaboration between the hospitals and the tertiary institutions. Because we all want them ready when they come out, and you want to make them ready, so how do we make that happen?* [C3: P1N]

Well-designed pre-registration clinical practice experiences provide the support UGNs need to safely apply their pre-registration education to clinical practice, learn and develop their practice readiness. Clinical experience gained through paid employment in healthcare positions complements this experience to further enhance their capability and consequently their practice readiness.

Paid employment in a healthcare position: Clinical experience gained through paid employment in the healthcare positions of an EN, assistant in nursing (AIN) or student in nursing (SIN) provides important experience that contributes to practice readiness. While the pre-registration education gained at university is necessary, working in the healthcare environment provides the *'lived experience'* [C2: P4N] as a healthcare professional to enhance their learning. As an employee, an UGN is respected as a responsible member of the healthcare team. As such, they are accountable to a different set of standards and expectations. The focus of the employee is on 'working' and meeting workplace responsibilities. This produces different learning outcomes to those achieved through UGN

clinical experience placements. The UGN engages in basic nursing care and learns about working in a healthcare environment, what to expect and what it means to be accountable and responsible for clinical care as a team member: *'It teaches you teamwork, respecting other people, definitely time management'* [C2: P8N]. The UGN's knowledge and confidence in nursing practice deepens and they develop a sense of belonging in the healthcare team. These factors enhance their practice readiness and support the transition period when they commence practice as a NGRN:

> *Makes the transition, I would say, easily 95% easier. And that's not just my anecdotal experience, but the anecdotal evidence that comes back from the wards, that they potentially know that those who've been employed as undergraduates as a student in nursing within our facility, those who are employed in those positions for more than 6 months prior to graduating, transition much quicker than those without any experience other than the university.* [C3: P3N]

NGRNs with paid employment experience were described as having a higher level of practice readiness. With this experience, NGRNs become more familiar with organisational resources, workflow and the role of nurses in healthcare. This helps NGRNs traverse the healthcare organisation and resources more efficiently. They know what to expect in the healthcare environment and are better able to '*set up, and manage their workload'* [C2: P6N]. While this does not alleviate all challenges associated with transition, it helps NGRNs adapt to their role and assimilate into the work environment more swiftly and proficiently:

> *Various nurses that have come through that have had work experience working as AINs prior to doing or alongside doing their degrees. It makes a big difference … they have a completely different attitude and they have a completely different perception of what is expected of them and what their expectations are when they come to work on the floor. It makes a big difference, you can see that with the way that they come on the floor, and they work. They have a different confidence. There is a different aura about them that makes them much more capable because they have a much better understanding of what is expected of them to start with*. [C2: P6N]

While UGN clinical placement experience and paid employment develop practice readiness, NGRNs also require constructive clinical experience as an RN to learn the RN role and become practice ready.

Clinical experience as a registered nurse: Clinical experience that enables constructive practice in the role of a RN is also essential for developing practice readiness. NGRNs gradually become practice ready during their first year of practice after reaching certain milestones at 3, 6 and 12 months. The first 3–6 months is the most vulnerable and critical timeframe. During this period, NGRNs learn the role of the RN first-hand and what this means. This is the time where *'things click together'* [C1: P9N], fall into place and NGRNs learn to adapt and cope with the people, systems and workloads. NGRNs *'get a good grip of things'*, settle in and become familiar with their new role, workplace routines and *'all the basic stuff'* [C3: P7N] in a nurse's clinical practice:

> *Because 3 months, the first 2 months some of them, it's the first time they've worked, some of them it's the first time they've worked full-time and it's shift work. Like it doesn't matter what ward you start on, the first 2 months are pretty difficult. By the third month, they're starting to settle in; by the fourth month, they're enjoying it.* [C4: P11N].

In the first 3 months, a NGRN's confidence and performance are easily destabilised. Concurrently learning about and coping with their responsibilities and workplace demands can make this initial adjustment scary, overwhelming and challenging. NGRNs are introduced to the unpredictable complexities of clinical practice as a RN; complexities not encountered nor emulated during their pre-registration education:

> *Theory is different than practice and—practice is more complex because you're dealing with not just one person, you're dealing with a whole lot of people; doctors, nursing colleagues, allied health professionals, patients, relatives, stakeholders, carers. You deal with the lot, which you don't deal with when you're in university. You're only dealing with your assignments and how to finish and do your prac or placement. But when you practice, it's a different ball game.* [C1: P10AH]

In this early 3-month phase, NGRNs need focused support to consolidate their basic practice and, importantly, establish their confidence. This is the time where the foundations of their ongoing clinical practice and learning are established. With this foundation in place, NGRNs can work more independently, build capability and function more effectively as a RN in different contexts of practice.

By 6 months, most NGRNs begin to *'get the hang of it'* [C4: P5N] and generally know what they are doing. The NGRN may still be nervous or anxious, but they are more confident, independent and autonomous, and better able to initiate and prioritise workload demands to the point that they begin to enjoy work. While NGRNs are working with more autonomy and less concentrated contact, they still require monitoring and access to support.

Between 6 and 12 months, NGRNs are *'well on their way'* [C4: P9N] and have a good understanding of their role: while challenges still exist, they cope better. By 12 months, the NGRN is *'reasonably rounded'* [C4: P6N] and able to manage and cope with their new responsibilities, particularly shift work: '*Yeah, they need about a year to be ready'* [C3: P1N]. The NGRN reaches a stable level of confidence and competence in their RN role and is described as practice ready.

The need for NGRNs' first year of practice to be a protected time of learning, '*a provisional year of practice'* [C1: P8N] and part of the education programs to become a RN was identified. Highlighting that *'you can never be ready until you're actually in the workplace'* [C1: P5M], medicine and AH professionals who currently have a year of clinical practice in their professional role as part of their degree program suggested this first year of registered practice was the foremost clinical experience within their degree that made them practice ready:

> *I mean, as a pharmacist I had to do a year working under another pharmacist before I qualified. So, you needed a whole year of hands-on learning before you could actually go out and be a pharmacist.* [C2: P10AH]

> *I think it's quite unfair to expect nurses to graduate from university and be fully practice ready. Nobody, like you wouldn't expect that of a police officer, you wouldn't expect that of any other graduate from university, like a lawyer, or a doctor. Doctors are given an intern year as well. They all need lots of help.* [C1: P8N]

HCPs find that when NGRNs attempt to practice as a RN in complex, unpredictable environments they experience many challenges for which they are not prepared and ready for. For NGRNs, these 12 months are a significant period of transition and learning. NGRNs experience peaks and troughs in their development before reaching a stable level of practice to become safe, competent RNs:

> *They go through the waves and you see it … 3 to 4 months they'll crash and burn, then they'll pick themselves up*—[that is] *if they don't crash and burn too much and we lose them. That's where we come in and stop that [losing them] and they come back up again … then you can see they plateau.* [C4: P9N]

HCPs advised that NGRNs need a structured program of support to help them manage the peaks and troughs associated with their transition, adapt to the environment and simultaneously learn and work as a RN.

Structured Program of Support

NGRNs require a structured program of support to develop practice readiness. A NGRN's first year of practice as a RN was described as an extension of their learning and a time to progressively integrate and consolidate their education with practice. This first year of practice is essentially the final phase of their nurse education, where NGRNs learn to be a RN while working as a RN. Having a *'formalised program of learning'* [C2: P4N] with sound educational support enables NGRNs to practice being a RN and achieve the standard required:

> *I see it as an extension of their learning. I think the recognition that they haven't finished learning, they're actually at the beginning, they're at another beginning in their learning … I've looked at it as that continual learning and that growth all the way through.* [C3: P8HR]

Further, the quality of a NGRN's first year experience can have a significant impact on a NGRN's ongoing trajectory in nursing: the *'first year makes a big difference to the whole person's career … whether they stay in the jo, and … where they work next'* [C4: P1N]. Comprehensive support is essential to creating positive experiences that inspire NGRNs, potentiate their learning and values and retain NGRNs as part of the healthcare workforce:

> *I don't think it matters whether you're a physio or a nurse or an OT* [occupational therapist] *or a doctor, everyone needs appropriate supervision and support and training and feedback, regardless of what stage in your career you're at, but certainly very important in that early beginning phase when you're learning new stuff all the time, there's new challenges you've never come across and it can be quite physically and mentally tiring working as opposed to being a student.* [C3: P10AH]

A combination of strategies provides the reliable level of support that NGRNs require. In this study, this support was provided through GNTPs; 12-month programs implemented by each HCP site that were focused on facilitating a NGRN's transition from student to RN. The overarching aim of the GNTP is to generate positive experiences that lead to NGRNs feeling welcomed, supported, competent and keen to learn and remain in nursing:

> *That first year is important, or even the first, we do 6 weeks, but the first 3 months are important, and it's all about recruitment and retention, isn't it, of staff because a lot of them can leave if it doesn't meet their expectations.* [C3: P5N]

Specific support strategies are essential to foster NGRNs' practice readiness that likewise facilitates a NGRN's transition from student to RN. The essential components described by HCPs include organisational and unit-based ***orientation*** and ***education***, ***regular feedback,*** and sequential 4–6 month ***clinical rotations*** with ***support persons*** who have the educational capability to facilitate learning.

Orientation: Organisational and unit-specific orientation was described as essential for integrating NGRNs into the workplace and developing professional and industry readiness. Orientation helps alleviate a NGRN's initial anxieties about working in the healthcare environment. An effective orientation is welcoming and informative, provides reassurance and fosters a sense of belonging. It provides supernumerary time that enables NGRNs to become familiar with their environment without the pressure of working. These orientations equip NGRNs with information about the organisation, location of departments and the systems, processes and people with whom they will work. In this way, the NGRN is more comfortable to ask questions, seek help and come to know the resources available to provide care. This enables them to be more autonomous and independent to work safely and efficiently:

> *A good orientation around the site to see where the departments are … Give them like supernumerary days … I think it's important for every environment before you work you need to know where places are. You start working on one day … and if the doctor asks you to get blood transfusion for a patient you're going to the pathology … you should know where the pathology is. Otherwise, you waste time … It takes only maximum 5 minutes … but if you don't know the place that's frustrating …*

> *Orientation and then you get used to the routine, the HCP Site 3 regulations, routines, and all that stuff.* [C3: P6N]

Education: Regular site-specific education for NGRNs can accelerate practice readiness through the acquisition of specific organisational practices and policies that help maintain safe standards of care. Regular education provides learning opportunities to establish and advance a NGRN's practice:

> *Nobody comes, nobody finishes their nursing knowing everything and being confident in everything that they're expected to practice on their first or second or third rotation. It's a lifelong continuum of learning, and I like—yeah, I like to think of our job as being filling in those gaps.* [C1: P8N]

Simulation sessions are helpful for this purpose. In these sessions, NGRNs are immersed in site-specific scenarios that enable them to safely demonstrate their practice readiness. This can also be useful to monitor a NGRN's progress, debrief with NGRNs and subsequently provide education tailored to their needs:

> *We give them scenarios that have been identified* [as necessary] *surrounding certain skills or situations, so knowing the resus trolley and the defibrillator, knowing all legal and ethical requirements of blood … that sort of thing. So those things, to me, are skills to make them work ready, that we identify* [for this HCP site]. [C3: P3N]

Regular feedback: Providing opportunities for regular, constructive feedback on performance is essential for enhancing a NGRN's confidence and capability. Effective feedback is encouraging, constructive and efficient. This type of feedback builds confidence that promotes learning, addresses performance issues and helps NGRNs find solutions to improve their practice: '*Because nobody can build their practice unless you get feedback. And you need both … you need to be propped up a little bit but then you also need to know what you're not doing quite appropriately'* [C1: P4N]. Again, simulation sessions are beneficial for this purpose and feedback from nurse leaders and senior clinicians is particularly effective in boosting a NGRN's confidence. Scheduling structured feedback at regular intervals during the first year at end of each rotation and the end of the GNTP means performance can be regularly affirmed and issues identified and rectified early:

> *Monthly paperwork that we fill out on the grad with all different areas and we tick exceeding expectations or doing whatever. That gives you and the grad numerous opportunities that if there is an issue it can be addressed, so that way a grad doesn't get to the end of their year and they go hang on a minute, there's all these issues.* [C4: P5N]

Clinical rotations: Offering NGRNs clinical rotations that are 4–6 six months in duration is optimal for developing practice readiness and can *'broaden their perspectives of nursing'* [C3: P5N]. Clinical rotations need to be long enough to consolidate and extend clinical practice but not too long that they are demotivating, unpleasant and limit learning and development. A 4–6-month timeframe allows NGRNs time to learn and establish their clinical practice in the healthcare setting and develop a measure of confidence to work independently and feel part of the healthcare team. This is particularly important for a NGRN's first rotation. As discussed earlier, the first 3 months of a NGRN's practice is the critical timeframe for them to consolidate basic nursing practice, learn about and develop confidence as a RN. Rotating NGRNs at or before this 3-month period can destabilise their confidence and progress to the point that with each rotation, the NGRN has to begin building their confidence and competence again. This perpetual erosion of a NGRN's confidence and development can make their transition more unpredictable and difficult:

> *At 3 months, those people are just starting to feel like they're contributing to the clinical environment. Then we reef them out and we put them in a different ward. That's not good for their confidence, because they just feel able, up and running and then they leave. So we've extended ours to 6 months for that reason … At the end of the 6 months, they felt comfortable and they started to enjoy what they were doing.* [C4: P2N]

Concerns about 6 and 12-month rotations emphasised the need for flexibility and careful allocation of these rotations. Challenges can arise when a NGRN spends a prolonged period in a clinical area they dislike, cannot cope with, do not fit in or when they want broader clinical exposure. Being in one area can also restrict or limit a NGRN's practice and development:

> *if you just do your graduate year and you're a graduate year on a neurosurgical ward, you're not going to be very good with things that don't involve brains leaking or anything.* [C1: P6M]

It can also make NGRNs more tentative about working in other clinical areas—*'it makes them scared to do other things'* [C4: P11N]—or lead to NGRNs leaving:

> *Being in an area that they haven't chosen. That's our biggest problem is we don't place them and often they're not matched to their preference. They're the ones we either have to work really hard with or they will leave.* [C4: P9N]

In the LOR case [C4], 12-month rotations were implemented for specialty areas of emergency and intensive care. A 12-month rotation allow NGRNs time to develop the necessary independent and autonomous clinical practice required for advanced levels of specialised healthcare. These rotations are allocated to SINs who have worked and been *'honed and moulded'* [C4: P8N] for the particular area and NGRNs who knew the clinical specialty in which they aspired to work: '*some people would prefer to do the direct entry because they know their clinical area'* [C4: P7N]. In specialty areas, NGRNs need a longer supernumerary orientation and more in-depth education and supervision periods to learn the required level of knowledge and skills to practice safely:

> *What we do here* [renal care] *is we give 3 weeks dedicated supernumerary time. That is one on one with their preceptor, no matter what level they are.* [C4: P2N]

As noted in Chapter 6 and 8, there were some concerns about NGRNs commencing their first year of practice in specialty areas. While acknowledging that it can be done, HCPs recognised that NGRNs are not ready for specialised clinical practice. Being practice ready for specialist areas requires a different and more advanced level of capability—capabilities NGRNs do not acquire in their pre-registration education. When a NGRN begins practice in a specialty, their learning needs are increased where they simultaneously need to learn their new role as a RN in addition to a new level and type of clinical practice:

> *No, I don't see that there's any way of really preparing yourself* [for paediatrics] *when the bulk of your training is adults … It's a different set of conditions and different parameters and different ways.* [C1: P6M]
>
> *I suppose unless they've done an emergency rotation before, ED is just another planet for them, and I must admit it probably takes them a good 6 months of solid ED practice before they find the rhythm.* [C1: P8N]

NGRNs who rotate to specialist areas can struggle to adapt to general practice in subsequent rotations: *'once you've been to ICU as your first ward ever, it's a massive culture shift to try and get* [back in] *to a general ward'* [C2: P11N]. This can destabilise a NGRN's confidence and create additional stress that can affect their transition. Further, NGRNs coming to specialist areas may need to *'start from scratch'* [C4: P2N] and learn new knowledge and skills to function as a specialist nurse in a specific environment:

> *It really is a matter of stepping into an environment and then having the ability to amalgamate into whatever that* [environment] *is. Whether that is dialysis or ICU, any of the specialty areas, you basically have to wipe your slate clean. Have zero expectations, and learn from scratch, because it is a different kettle of fish in dialysis, or different skill set.* [C4: P2N]

Many HCPs recommended that NGRNs rotate to a specialty area, however, after 3–6 months of working in a general area of clinical practice. NGRNs who rotate to specialty areas after a general area perform more competently and confidently in their role. General clinical areas are said to provide better opportunities for NGRNs to establish their confidence, consolidate their foundational nursing practice and get their '*basics intact first*' [C2: P1N]. With the basics intact, NGRNs have a solid platform to build specialty practice, making the transition easier. NGRNs achieve better learning outcomes with this sequence and the opportunity to develop and retain specialist nurses improves:

> *I'd like them to come as a second rotation, not the first rotation. I'd like them to get some experience on the wards to ground that whole basic general nursing care first.* [C4: P13N]

Support persons: NGRNs are effectively supported when individuals with dedicated time and educational capability are available to support their development and transition from student to RN. Support for NGRNs includes RNs who act as preceptors, and simultaneously work with NGRNs and manage a clinical workload, and RNs employed in specific positions dedicated to supporting NGRNs. These positions can be educators appointed to NGRN transition programs, organisational education departments or clinical units. These individuals provide orientation and ongoing education, conduct performance reviews and provide intensive, one-on-one support for NGRNs when required.

Modifying support to accommodate a NGRN's individual needs relies on having the capability to do this. As discussed in Chapter 8, NGRNs enter the workplace with different levels of practice readiness and require different levels of support. NGRNs may need intensive support for longer periods, or less intensive episodes of supervision and more distant monitoring. Further, a NGRN's age, life and clinical experience, learning style, personality and maturity can influence their development:

> *Two people pick up at the same times, there'll be different levels. If someone's picking up faster than another the one who's staying back needs more time so we should give them more time and help to get into that level when they're ready to work.* [C3: P6N]

Those supporting NGRNs, particularly preceptors and NGRN educators, need educational capabilities; HCPs identified a range of capabilities they perceive as effective. These are listed in Table 28 and emphasise the need to be approachable and committed with clinical and educational capability:

> *The preceptor has to be the right kind of person. The preceptor can't just be anybody who thinks they're a good person. They need to be suited to that role, they need to want to do it, they need to be good teachers, they need to be socialisers, they need to be resource people, they need to be lots of things, they need to be friendly and … very, very approachable.* [C1: P2N]

Table 28: Support person capabilities

'*That's the underpinning factor, the philosophy: we are passionate about grads*' [C4: P9N]

• Motivated and wants to precept NGRNs: passionate about NGRNs
• A balance of intellectual and emotional intelligence
• Sound interpersonal skills
  ➢ Patient, empathetic, kind, inclusive and encouraging
  ➢ Open, approachable, relatable, organised and available
  ➢ Fair and impartial with an understanding of what it means to be 'new'
  ➢ Experienced and knowledgeable with sound clinical skills
• Educated in how to teach, precept and facilitate learning
  ➢ Able to identify NGRN's levels of readiness, confidence, comprehension and clinical skills
  ➢ Can adjust support to provide learning experiences that meet the needs of the individual
  ➢ Able to give sound counsel, coach and empower individuals

Ensuring preceptors who support NGRNs are committed and keen to be involved is essential for positive outcomes. This means choosing *'the preceptor that wants to precept'* [C4: P7N]. Some preceptors may not get on with NGRNs, some staff do not want to support new learners and others may have qualities suggested as unsuitable for support roles: '*We sort of tend not to let the strong personalities in too much'* [C3: P5N]. Pairing NGRNs with those individuals in any of these situations can have detrimental outcomes:

> *If they don't click with that preceptor. It can undermine their confidence very, very quickly and the confidence they had in what they knew no longer exists anymore.* [C4: P1N]

The most significant support comes from individuals employed in specific educational positions dedicated to NGRNs. Contemporary workplace environments are complex, dynamic and challenging for those new to these environments to navigate. NGRNs are new to being a nurse and the environment. They can be apprehensive about approaching staff, including their preceptor, particularly when they begin a clinical rotation, or staff appear stressed, rushed or intimidating. Educational leaders in the workplace who are approachable, respectful and available cultivate pathways for NGRNs to ask questions, voice concerns and express limitations without feeling intimidated or incompetent. This simultaneously eases anxiety and enhances learning. NGRNs are more likely to seek help when approachable, dedicated support people are available:

> *If they're doubtful about anything they need that person that they've developed a rapport with and a relationship with that they feel comfortable with to go and ask them questions.* [C1: P2N]

When NGRNs require intensive or longer periods of support, particularly in the first 3 months of practice, individuals employed in dedicated education positions have more opportunity to support and facilitate learning. Without this level of educational support NGRNs can '*flounder and lose confidence'*, slowing their progress. This can lead to the need for even longer periods of support or NGRNs providing substandard care that negatively affects patient outcomes. If dedicated educators are not available, this responsibility lies with the healthcare team, who may already be overburdened with healthcare demands. Providing intensive support to a NGRN can often remove a staff member from the team and increase the workload of other team members. This additional workload pressure can also reduce the

team's ability to provide adequate care, increase stress levels and alter staff attitudes towards NGRNs:

> [It's important] *they feel comfortable to ask for support, otherwise they'll flounder away and nobody has spoken to them and then they just get labelled as 'whatever' but it's so important to have that nurse that they trust and that they can go to and if that's not there then … They flounder, and through no fault of their own.* [C1: P2N]

> *You have to have someone who can be on the floor, be receptive to people's individual needs and pick up on those cues*. [C4: P2N]

Providing effective support can influence NGRN recruitment and retention. In one case, the support provided through a well-designed NGRN program influenced NGRNs decisions to apply for NGRN positions at their facility:

> *So last year alone we had, which was a rarity, we had grads from Perth, Canberra, Melbourne, Sydney, Brisbane … They* [are] *mostly drawn to the support, the program.* [C4: P9N]

Recognising the challenges in learning and working in a healthcare environment, HCPs suggested that NGRNs not only require relevant experiences and support to achieve successful outcomes; they also require the right environment to flourish.

9.2.2 The Right Environment to Flourish

The 'right environment to flourish' describes the factors that contribute to creating a workplace environment that enables NGRNs to develop, demonstrate and enhance their practice readiness. A positive environment provides a context where NGRNs can feel respected, safe and supported:

> *They need to have a friendly atmosphere, they need to have a go-to person that's friendly, warm and welcoming and happy to see them and they also need to have—the staff around them need to welcome them and make them feel valued and I can't stress enough how they need to be made to feel like they belong. If they don't have that they don't get off to a good start.* [C1: P2N]

In these environments, NGRNs can safely put their learning into practice and demonstrate their level of practice readiness. In this way, the workplace environment supports NGRNs to evolve as RNs. Findings indicate that positive, firm, fair leaders and collegial healthcare teams committed to supporting learners cultivate positive, safe environments that support education and enable NGRNs to thrive and evolve.

Positive Firm Fair Leaders

The type of leadership in the healthcare environment engenders workplace conditions that influence both the workplace culture and how healthcare teams function. Culture represents the shared attitudes, social conventions, values, goals and practices that characterise a workplace. Influential leaders include the hospital executive, NUMs, NEs and senior staff of all healthcare disciplines but mostly clinical nurses (CNs). In some instances, '*dominant, loud staff with influence'* [C4: P12N] were classed as influential leaders. The leadership style of NUMs was described as the most salient influence:

> *So good leadership, and from the top but super important for a NUM in a ward they are integral to how a new graduate nurse performs and how they turn out is their ability to be good leaders. They are the ones that need to be saying hello whoever she is, use her name, say if there's anything I can do to help you come and—my door is open, and touch base with them every few days.* [C1: P2N]

The leader's attitude towards and interactions with NGRNs influences the attitude of staff and how they welcome and support NGRNs. If leaders are positive towards supporting NGRNs, NGRNs are embraced by the team and given opportunities to develop their clinical practice:

> *It comes from the nurse unit managers or clinical nurses, if they can't see the value of teaching … then those graduate nurses will get a hard time.* [C2: P4N]

Leaders generating enriching workplace conditions for NGRNs consistently exhibit the positive interactions described in Chapter 6 and are fair, firm, friendly and approachable; *'not nasty and aggressive'* [C3: P5N]. This makes it easy for NGRNs to develop a rapport with them and seek their guidance and support:

> *Our NUM is awesome. She's amazing. She's very friendly and everything. You can always go and tell her, and she tries really hard just to make it not too harsh on both sides* [of a problem]. *She explains things. They're* [NGRNs] *not left alone*. [C3: P7N]

Unlike leaders in negative workplaces—described as absent and ineffective, antagonistic or indifferent towards NGRNs—leaders of positive workplaces demonstrate resilience and situational awareness; they know what is happening in the clinical environment with both patients and staff. These leaders focus on ensuring adequate staffing and skills mix and maintaining a positive atmosphere even when the day is busy and everyone is overloaded. They prioritise human interactions and experiences (staff and patients), keep in touch with their teams and outline expectations. Where leaders manage the work area effectively, NGRNs are supported to learn. NGRN workloads are altered according to their ability, individuals to support them are made available and educational opportunities protected. These leaders monitor NGRNs as part of their team and provide relevant support when required:

> *Luckily, her NUM picked up in the first week that she was struggling a little bit, and was really supportive and great and tried to put a facilitator with her, contacted L & D* [learning and development] *and that sort of thing to bring her up to speed, basically, and she really thrived from then on.* [C1: P4N]

> *That's where it's important that we have resilient leaders on the floor who can see that this doesn't mean she's not practice ready, it just means she needs a little bit more support*. [C4: P10N]

Senior CNs in the healthcare team are significant leaders that shape NGRNs' experiences. These nurses can influence how a NGRN is accepted and integrated into the team. Senior nurses who demonstrate polite and respectful interactions with the ability to educate, debrief and reflect with NGRNs on their practice are key role models. Actions such as listening to a NGRN and inviting them to share knowledge are respectful interactions that make the NGRN feel valued and recognised as part of the team. Having approachable senior nurses in the workplace gives NGRNs an avenue to seek help, making them feel safer and supported:

> *The senior nurses and the welcome they get on the ward. If you see pleasant faces around, you'll be confident to ask them if you need 'Can I have a hand?' or something. I think that is the main thing.* [C3: P6N]

Collegial Healthcare Teams

Leaders modelling positive, equitable and supportive interactions create supportive healthcare teams that result in positive workplace environments. Supportive healthcare team members are respectful and helpful to each other and welcoming, inclusive and encouraging with

NGRNs. NGRNs are embraced and eased into the team with collegial support. Positive interactions dominate team members' relationships:

> *Our NUM is very approachable, her door is always open. She's a fabulous boss and it filters from the top. If you haven't got a friendly boss, no one's going to go to her, so we're very fortunate … the staff are all very open and everyone does genuinely care about the other person working down the other end of the floor.* [C2: P8N]

Approachable team members providing constructive feedback help NGRNs to make sound decisions and a comfortable atmosphere to seek help and disclose their limitations, thus reducing the opportunity to make mistakes. Teams demonstrating mutual respect, free-flowing communication and shared expectations foster a sense of inclusion and help NGRNs *'find their niche'* [C1: P2N]. These teams accept differences and all team members look for opportunities for NGRNs to learn and contribute to their growth and socialisation.

Positive leaders and supportive healthcare teams cultivate an atmosphere in the workplace where learning is prioritised. In this type of environment NGRNs are more able to demonstrate their readiness, learn and grow in their new role. In positive workplaces, support is consistent and provided by the healthcare teams and NEs who have the educational capabilities to promote learning and development. Role models and *'graduate friendly, happy nurses'* [C1: P3N] foster positive engaging encounters with NGRNs that demonstrate they are valued and respected. Giving responsibility to NGRNs helps them grow as clinicians and people. NGRNs are embraced and staff are willing to help and open to learning from the NGRN.

Consequently, NGRNs navigate the workplace safely and efficiently. A supportive workplace reduces a NGRN's anxiety, fosters confidence in their clinical decisions and enables NGRNs to perform safely. Even on difficult days, patient safety and job satisfaction endure:

> *You could have a shocking shift where you haven't eaten all shift, you haven't gone to the toilet, you've barely drunk any water but you've worked with a cracking team of people and you're just buggered at the end of the day. But it's still a good shift because you got everything done, nothing bad happened, you got all your basic cares done and you worked together and helped one other; that makes for a good team. And that's where these nurses* [NGRN] *can flourish because they know that someone's got their back if something—you know, everyone's there to help.* [C2: P8N]

Conversely, in workplace environments where leaders do not value teaching and staff are unhelpful, or have negative attitudes, NGRNs experience different outcomes. Negative attitudes and interactions can dampen the workplace optimism, inhibit teamwork and create conflict in staff relationships where avenues to seek support are reduced. These workplaces can unsettle NGRNs where they feel intimidated, isolated and unsure about approaching individuals for help. Consequently, they struggle with their workloads, risk making errors and lose their confidence and enthusiasm. When these conditions persist, HCPs explained that NGRNs develop a negative attitude to their work or consider leaving.

Findings highlight the influence of collegial workplaces on the growth and development of RNs. With positive experiences, NGRNs are more likely to want to stay in a workplace and remain in nursing:

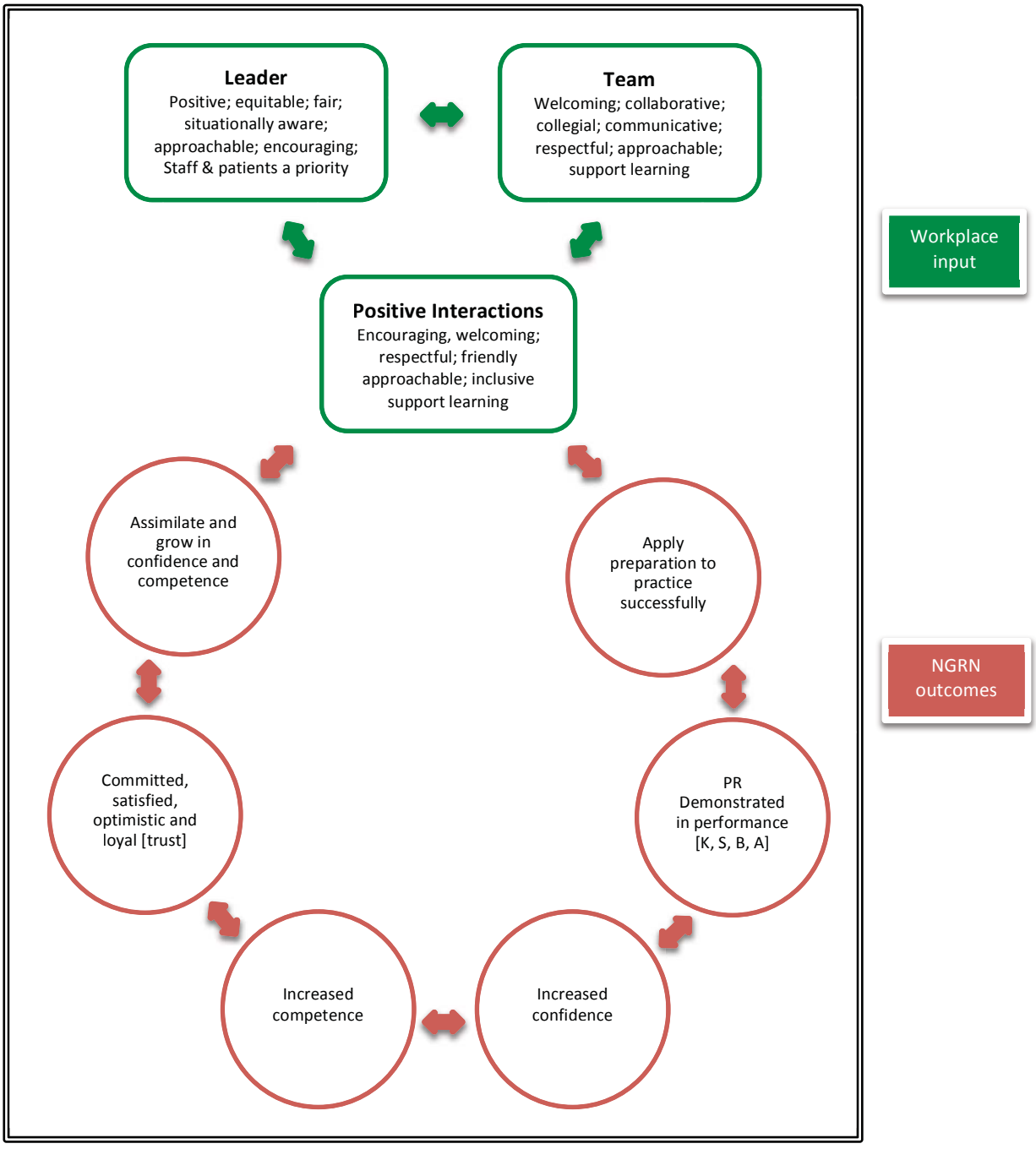
> *Really good support and good facilitators and good preceptors and a nice environment to work in and then they won't want to leave* [nursing]. *I think it's a good measure of success with graduate nurses is if they want to stay.* [C1: P2N]

Figure 19 summarises the impact and outcomes of NGRNs working in positive workplace environments.

9.3 Chapter Summary

This chapter has described the fourth major category of the findings: ***Developing practice readiness***. Fostering practice readiness relies on quality clinical experiences that provide new nurses with the exposure and experience of being a RN; well-structured support that facilitates continual leaning and development; and positive workplaces that enable UGNs and NGRNs to thrive and evolve. Together, these factors support NGRNs in achieving the level of practice readiness necessary to work effectively and develop as a RN. In Chapter 10, the findings presented in Chapter 6–9 are discussed in the context of current evidence with recommendations as a result of this discussion presented in Chapter 11.

Figure 19: Input and outcomes of positive workplace environments



Chapter 10: Discussion

10.1 Introduction

The aim of this study was to define NGRN practice readiness from the perspective of Australian HCPs and explain the process by which a NGRN is determined to be practice ready. In addressing this aim, multiple perspectives from four different groups of HCPs across four distinct geographic locations were sought. These perspectives informed the development of four major categories that explain how HCPs define and determine practice readiness: dominance of context, and defining, determining and developing practice readiness. This chapter considers the findings of this study in the context of the literature.

10.2 Understanding Practice Readiness

The findings of this study confirm and extend evidence from other studies that have sought to explore and understand the meaning of practice readiness and its associated capabilities (Brown & Crookes, 2016a; Caballero & Walker, 2010; Caballero et al., 2011; El Haddad, 2016; Holland et al., 2010; Missen et al., 2015; Walker et al., 2013, 2015; Wolff, Pesut et al., 2010; Wolff, Regan et al., 2010). There is consensus that practice readiness encompasses more than being competent in a set of clinical knowledge and skills (Caballero & Walker, 2010; Caballero et al., 2011; Walker et al., 2015; Wolff, Regan et al., 2010). Practice readiness a multidimensional concept (Caballero et al., 2011), characterised by a range of capabilities (Walker et al., 2015; Wolff, Regan et al., 2010) and shaped by context (El Haddad, 2016; Wolff, Pesut et al., 2010). Individuals perceive practice readiness differently depending on their personal and professional context, leading to different meanings and expectations of practice readiness (El Haddad, 2016; Wolff, Pesut et al., 2010). As a result, practice readiness is a nebulous concept that is fluid and evolving, can lack clarity (El Haddad, 2016; Wolff, Pesut et al., 2010) and be difficult to assess (Caballero & Walker, 2010) with few valid, reliable methods to determine practice readiness (Caballero et al., 2011; Walker et al., 2015).

Practice readiness, often referred to as work readiness or fitness for practice, is commonly described as the degree to which graduates possess certain characteristics or the necessary knowledge, skills, attitudes and attributes that prepare them to move seamlessly into practice, or to prepare them for the work environment and/or success in the workplace (Caballero et al.,

2011; El Haddad et al., 2013; Walker et al., 2015; Wolff, Pesut et al., 2010). Findings from this study indicate that practice readiness as it pertains to NGRNs is more specific. This research demonstrated that practice readiness is a complex, multidimensional concept that embodies a range of interrelated capabilities that evolve over time and alter with context. Practice readiness develops over a NGRN's first 12 months of practice and refers to the extent to which they possess the capabilities to fulfil RN responsibilities at a novice level and manage themselves and their environment to work safely and efficiently in the provision of healthcare.

While a range of factors influence NGRN practice readiness, this study demonstrated the power of context in shaping HCPs' perceptions and decisions about practice readiness. These decisions about practice readiness are subjective and variable, leading to diversity in the meaning of practice readiness and HCPs' needs with respect to a NGRN's performance on entry to practice. This finding is consistent with those of El Haddad (2016), that nurses in the education and practice sector hold divergent views of practice readiness as a result of various factors within their specific contexts. El Haddad (2016) concludes that practice readiness is a 'nebulous' concept that means 'different things to different people' (p. 118). In a study of 150 Canadian nurses employed in regulatory, education and practice sectors, Wolff, Pesut et al. (2010) also found that nurse's historical and social context shape their views and expectations of practice readiness. Wolff, Pesut et al. (2010) highlight the importance of understanding practice readiness within the context of those defining it and the need for a shared understanding of practice readiness between sectors to support the preparation and integration of NGRNs. This study reflects these findings, indicating that NGRNs' practice readiness needs to be understood within the context in which it is required and that this context should be considered in the preparation of NGRNs for practice.

In this study, the differences in practice readiness between HCPs related to the capabilities they prioritised for a specific context, as opposed to identifying different capabilities. The most prominent differences were the capabilities prioritised for rural and specialty healthcare practice. Unlike Missen, McKenna, Beauchamp and Larkins (2016a), who found no significant difference in the capabilities required between geographic locations, this study found that high-level psychosocial capability and knowledge of community to manage the isolation and negotiate relationships was prioritised for working in rural or remote locations. In addition, HCPs prioritised certain levels of knowledge and skills for working in specialty

areas and accommodated this need by adapting NGRN transition programs to provide specialised orientation and education.

10.2.1 A Need for Practice Readiness

El Haddad (2016) asserts that multi-sectorial dissonance in our understanding of NGRN practice readiness perpetuates the perception that NGRNs are not practice ready; the inadequacy of nurse education to prepare NGRNs for practice and the disparity in expectations of NGRNs when they commence practice. Studies report differences in expectations and the performance of NGRNs in practice (Brown et al., 2015; Brown & Crookes, 2016b; Missen, McKenna & Beauchamp, 2016; Missen et al., 2016a). Similar findings about NGRNs are reported in literature describing NGRNs' skills deficits on entry to practice (Freeling & Parker, 2015; Missen et al., 2016b; Theisen & Sandau, 2013), and their development and experiences during their first year of practice (Ankers, Barton & Parry, 2018; Walker, Costa, Foster & de Bruin, 2017).

Findings from this study concur with these assertions; however, contrary to previous research, the findings from this study suggest that HCPs *need* more than *expect* or *want* NGRNs to be practice ready or to 'hit the ground running'. This need is driven by factors in the healthcare context, particularly the pace, demand and complexity of healthcare that create constraints on HCPs' ability to effectively support NGRNs in the workplace. The context of healthcare portrayed in this study depicts constant change, constraints and challenges that can alter a RN's responsibilities and a NGRN's performance. Changes in healthcare are inevitable where financial and political reform, and geographic location and service delivery influence HCPs' needs of the healthcare workforce. Therefore, the context of healthcare drives HCPs' needs—rather than their expectations—of NGRNs' performance as much as it informs the capabilities associated with practice readiness. Further, while the standards and codes for practice (NMBA, 2016a) and nurse education (ANMAC, 2012) are available to guide expectations of NGRN's performance, these were not prominent in how HCPs in this study assessed NGRN's performance to define or determine readiness. HCPs relied more on their experiences and knowledge of what they perceive NGRNs need to work within healthcare contexts.

In contrast, HCPs in this study were more vocal about what they *did not expect* of NGRNs. While HCPs may want and need specific knowledge or higher levels of competence, they did not expect this, nor did they find this in NGRNs when they commenced practice. Based on

their experiences with NGRNs, HCPs know they are not practice ready and require additional time and support to become a confident, competent RN, particularly in the first 3–6 months of practice. This corresponds with findings from Brown and Crookes (2016b) who found that experienced RNs rated NGRNs as not being independent (competent) in at least 26 of the 30 skills identified as necessary for practice, leading to their conclusion that there is no clear expectation that NGRNs would be competent and that overall NGRNs are 'not work ready' (p. 7). Like HCPs in this study, Brown and Crookes (2016a) state that NGRNs continue to 'enhance and develop their practice within the workplace' as they consolidate their learning in practice (p. 2). NGRNs learn first-hand the complex interplay of nursing knowledge and practice while in the role of the RN (Brown & Crookes, 2016a).

10.2.2 Novices Expected to Be Experts

Expectations of a RN's performance, including that of NGRNs, are led by the profession. The expected standard for all RNs, including NGRNs, are outlined in the *Registered nurse standards for practice* (NMBA, 2016b). As the standards indicate, 'Together with NMBA standards, codes and guidelines, these Registered nurse standards for practice should be evident in current practice' (NMBA, 2016b, p. 1). On graduation, UGNs are expected to meet these standards for registration as a nurse (ANMAC, 2012). This implies that NGRNs, on entry to practice, are expected to be performing at the same standard as their experienced, senior colleagues.

The RN standards for practice (NMBA, 2016b) describe practice that reflects Benner's (1984) competent level of clinical practice. While NGRNs may have practised according to the standards in a controlled university setting or while under close supervision during clinical placement experiences, acquisition of capability and competence requires authentic rehearsal and experience in context (Baldwin, Mills, Birks & Budden, 2017; Benner et al., 2010). Therefore, most NGRNs will likely commence their new role without having developed the capability or the level of proficiency required to meet all of the RN standards for practice. Further, as this study indicated, NGRNs need to have confidence to be ready to practice competently; confidence that develops overtime and can take 6–12 months to achieve (Benner, 1984; Duchscher, 2008; Holland et al., 2010). HCPs in this study described NGRNs as novices in the initial stages of their clinical practice who are only expected to possess a basic level of competence and who require direction and close supervision. These outcomes and behaviours reflect the novice practice outlined by Benner (1984) who describes this as

being rule governed and dependent on a level of direction and supervision where clinical development gradually progresses as confidence improves (Benner, 1984).

Findings from this study suggest NGRNs reach a competent level of practice that equates with practice readiness after 12 months of being a RN. This concurs with Benner (1984) who describes a competent nurse as one who, after 12 months of clinical practice, performs independently and confidently, knows what to expect, thinks more critically, decides more accurately and manages their responsibilities more efficiently. These nurses have had time and experience in the setting and the role working with other nurses to live and learn to be a nurse. They assimilate the expectations of the profession and the workplace. This is the standard reflected in the RN standards for practice (NMBA, 2016b). Findings from this study would support the contention that acquiring the capabilities to practice according to the RN standards for practice (NMBA, 2016b) prior to registration may be a questionable professional and educational goal that leads to unrealistic expectations of performance (Ankers et al., 2018; Brown & Crookes, 2016b; Clark & Holmes, 2007; El Haddad, 2016; Rush et al., 2013; Walker et al., 2017).

10.2.3 Nurse Education Meeting Expectations and Needs

Nurse education programs are designed to meet the needs of the profession, healthcare industry and consumers, all of whom are consulted in the process of regulating nurse education (ANMAC, 2012). The NMBA standards, codes and guidelines guide the education of nurses in Australia and the subsequent outcomes of this education (NMBA, 2016a). Outcomes of recent reviews suggest that this current model of nurse education might not be adequate in preparing NGRNs who are ready to meet needs of the healthcare industry (Freeling & Parker, 2015; Christiansen, Jacob & Twigg, 2018; Missen et al., 2016a). Some evidence suggests accreditation processes of nurse education programs are problematic (Ralph, Birks, Cross & Chapman, 2017); other studies have suggested a misalignment in the content of programs with healthcare needs (Birks, Ralph, Cant, Chun Tie & Hillman, 2018; Ralph et al., 2014). As noted earlier, a wide body of evidence from the perspective of NGRNs and the healthcare sector indicates NGRNs may not have the capability to practice competently as required by the RN standards for practice (NMBA, 2016a) when they commence practice. The rapid advancement and change within healthcare and ongoing health reform can make it challenging for nurse education and regulators to maintain currency of curricula. Ralph et al. (2014) found that emerging trends in healthcare were ‘poorly reflected’

in Australian UGN programs, suggesting nurse education is not maintaining pace with advances in healthcare (p. 9).

Processes to maintain currency can be constrained by time, funds and relationships, where a high level of collaboration between peak bodies is required to sustain ongoing development (Chiarella & White, 2013; Ralph et al., 2017). The development of the current RN standards for practice is evidence of these challenges (Cashin et al., 2017), with a 10-year timeframe between versions and similarly, the development of the RN accreditation standards developed in 2009 and 2012, and under redevelopment in 2018. HCPs in this study also indicated a generalist approach focused on foundational nursing capabilities is required for practice readiness. Ralph et al. (2017) explain however, that while having a broad, generalist approach to RN preparation is necessary to meet diverse service needs, this can justify the inclusion of broad content that reflects competing political and personal agendas rather than sound curriculum design and relevant content to meet standards for practice.

Further, Shahhosseini and Hamzehgardeshi (2014) suggest 'knowledge gained through basic professional education has a half-life of 2.5 years, and needs to be updated at the end of this period' (p. 184), highlighting the importance of ensuring the capability developed during UGN programs is contemporary, relevant and fundamental to sustainable nursing practice. The involvement of clinical partners to nurse education is crucial to currency of practice (Benner et al., 2010) yet sometimes challenging to achieve (Bodak, Harrison, Lindsay & Holmes, 2018). Without this, the reality of contemporary healthcare may not be captured within UGN programs and NGRNs will graduate without a transparent, informed view of what to expect and how to cope. Ralph et al. (2017) advocate for a more systematic, evidence-based approach to curriculum design to improve the quality of UGN education and maintain timely alignment with healthcare trends rather than competing stakeholder agendas.

Findings from this study extend those of Brown and Crookes (2016b) and El Haddad (2016) who suggest that the level of competence that can be expected of a NGRN on entry to practice needs clarification. A lack of specification can lead to disparity in the expectations of practice. This research suggests that concomitant with standards, codes and guidelines, the level of practice for NGRNs should be exemplified to provide NGRNs and education and practice partners with an understanding of what to realistically and reasonably expect of NGRNs' performance on entry to practice and over the first 12 months. Further, developing systems and processes to create reciprocal collaboration and more regular review of education and

standards for practice would be beneficial to maintain currency and alignment of expectations of NGRNs' performance.

10.3 Domains of Readiness—Capabilities for Practice Readiness

As the findings in this study illustrated, despite the differences in contexts and experience there was consensus on the fundamental capabilities required for practice readiness. This study found that NGRNs' practice readiness encompasses capabilities (knowledge, abilities, and attributes) that fall into four domains of readiness—clinical, professional, industry and personal—which intersect to demonstrate a NGRN's level of practice readiness. The domains and associated capabilities echo and extend those identified in other studies describing the attributes, competencies and practice of NGRNs (Brown & Crookes, 2016a; Walker et al., 2015; Wolff, Regan et al., 2010). Walker et al. (2013), for example, explored practice readiness with graduate professionals and then with NGRNs (Walker et al., 2015) and identified four work readiness factors: 'social intelligence, organisational acumen, work competence, and personal characteristics' (p. 118). Likewise, Wolff, Regan et al. (2010) found readiness reflected four areas of practice: 'having a generalist foundation and some job-specific capabilities; providing safe client care; keeping up with the current realities and future possibilities; and possessing a balance of doing, knowing and thinking' (p. 6).

10.3.1 Clinical, Professional and Industry Readiness

In this study, the capabilities associated with clinical readiness reflect those in Walker et al.'s (2015) 'work competence' (p. 118) and two of Wolff, Regan et al.'s (2010) categories: 'having a generalist foundation and specific capabilities applicable to diverse settings and clients' and 'a balance of knowing, doing and thinking' (p. 6). Collectively, these advocate for NGRNs to possess relevant, fundamental clinical knowledge and skills to provide competent, safe nursing care across clinical settings. In Wolff, Regan et al.'s (2010) category of possessing a 'balance of doing, knowing and thinking' (p. 8), critical thinking underpins a NGRN's ability to bring together aspects of knowledge and practice to provide care. In this study critical thinking and time management capabilities were categorised with professional readiness. These two capabilities are fundamental to all areas of NGRNs' professional responsibilities as a RN, not just their clinical practice. Professional readiness in this study encompassed a broad range of factors that related to NGRNs enacting their professional standards and codes of practice. Knowing and maintaining professional standards and

acknowledging limitations ensures NGRNs maintain patient safety, which in this study was an underlying concern for HCPs. Critical thinking is necessary for safe clinical practice, managing workloads, time and problems related to their responsibilities. A similar theme of responsibility in work competence and professional development is included in Walker et al.'s (2015) category of organisational acumen; however, the construct described by Walker et al. (2015) more closely aligns with the domain of industry readiness in this study. Industry capabilities reflected in Walker et al.'s (2015) organisation acumen are related to NGRNs being orientated and knowledgeable about the healthcare system, where they work, their clients and the processes and resources available to support them in their new role. These enable NGRNs to function more efficiently and safely in the workplace.

10.3.2 Personal Readiness

An important finding from this study is the significance of personal readiness capabilities for practice readiness. HCPs identified these capabilities above others as essential to the work of an RN in all contexts of practice. These capabilities overlap in all domains and as such underpin a NGRN's ability to enact all capabilities and function competently. Well-developed personal capabilities are associated with safe professional practice and quality patient outcomes (Amer, 2013).

The personal readiness capabilities in this study generally correspond with two of Walker et al.'s (2015) constructs: personal characteristic and social intelligence (p. 636). Comparable capabilities include psychosocial skills to communicate, seek support and relate well to others, teamwork skills and having resilience and flexibility to adapt to change and cope with stress and adversity. Resilience and communicating with others for support, teamwork and for managing conflict is critical to a NGRN's transition and integration to the workplace (Walker et al., 2017). Wolff, Regan et al.'s (2010) category of 'keeping up with the current realities and future possibilities' also reflects the need for NGRNs to be equipped 'to adapt to new and changing circumstances in healthcare, nursing, and the provision of client care' (p. 7). Similarly, findings from this study indicate that personal readiness enables NGRNs to manage relationships as well as the unpredictable change and challenges that pervade healthcare contexts and cause significant stress for NGRNs. NGRNs engage in a range of situations and relationships that can often expose them to pressure, conflict or hostility (D'Ambra & Andrews, 2014). NGRNs can often find themselves in positions of leadership and managing high workloads before they are ready and often without support (Evans, Boxer & Sanber,

2008). As HCPs in this study described, negative interactions with HCPs can intimidate NGRNs and undermine their confidence and performance. These situations can cause heightened anxiety, stress and burnout, and are known to perpetuate NGRN attrition (D'Ambra & Andrews, 2014). Having sound psychosocial capability and resilience enables NGRNs to manage adversity, communicate for safe practice and seek support where needed (Laschinger & Grau, 2012).

As part of personal readiness, a NGRN's level of confidence underpins their capability to perform competently as a RN. Walker et al. (2015) identify confidence as part of work competence that contributes to patient safety and Wolff, Regan et al. (2010) identify that self-confidence coupled with critical thinking underpins overall competence for practice. Conversely, in this study, developing confidence was necessary to enable critical thinking and safe practice. HCPs found NGRNs do not initially have the confidence to apply knowledge to practice, think critically and work independently. For this reason, HCPs focused on establishing a NGRN's confidence as a RN early in their development. Similar to HCPs in this study, Ortiz (2016) found NGRNs' confidence develops over the first 12 months of practice and is essential for work efficiency and safe quality care, particularly in complex healthcare environments.

A NGRN's level of confidence reflects their self-efficacy and shapes their proficiency in practice (Duchscher, 2009; Ortiz, 2016; Purling & King, 2012). Self-efficacy is an individual's belief in their abilities to succeed in a situation and to exert control over their motivation, behaviour and social environment (Bandura, 1977). Self-efficacy plays a major role in how individuals perceive and respond to different situations (Bandura, 1977). Results from a cross-section survey of 165 nurses in Canada by Laschinger and Grau (2012) showed that NGRNs with higher levels of personal resources and greater self-efficacy experience lower levels of bullying and detrimental health outcomes. Building 'physiological capital' and 'personal dispositional factors' can reduce the impact of incivility on a NGRN's wellbeing (Laschinger & Grau, 2012, p. 289). Resilience was a personal capability prioritised for working in rural and remote areas in this study. In these locations the isolation, limited resources and support, and the higher level of proficiency required could generate additional stress for NGRNs; being resilient strengthens NGRNs' ability to manage these challenges (Bennett, Barlow, Brown & Jones, 2012).

NGRNs will continue to work across multiple environments characterised by constant change and unpredictability. Wolff, Regan et al. (2010) suggest that NGRNs need competencies that 'prepare them for a global world' (p. 9). According to Barnett (2012), graduates need to be prepared with generic skills for an 'unknown future' (p. 65). Learning for the future is goal driven yet needs to accommodate future practice that remains unknown (Barnett, 2012). Barnett (2012) argues that our current world is one that is characterised by uncertainty and complexity that leads to stress and unknowable, uncertain events, where resources are constantly expanded and unbalanced, including our own personal resources. A level of human development that cultivates the dispositions and qualities is necessary to cope and learn in this uncertain world (Barnett, 2012). Preparing graduates in this way means they not only function effectively and safely within a complex world but are able to respond and 'prosper' with it (Barnett, 2012, p. 68). Further, uncertainty has been found to boost learning where unpredictability and volatility stimulate cognition for learning (Massi, Donahue & Lee, 2018). Having the capability to adapt in these environments can potentiate learning and improve capabilities such as critical thinking and problem solving (Massi et al., 2018).

Wolff, Regan et al. (2010) contend that practice readiness is not static and will evolve. Enduring capabilities are necessary to maintain alignment with the rapid progress and evolution in healthcare, the healthcare system and nursing. Focusing on developing personal readiness capabilities provides sustainable, foundational capabilities for working in unpredictable, demanding healthcare contexts. These empower NGRNs to respond effectively to their responsibilities, to learn and provide safe, efficient patient care across contexts of practice.

10.4 Cultivating Practice Readiness

The analysis identified a number of strategies HCPs in this study suggested would develop and enhance NGRN practice readiness. Three areas were particularly important to HCPs: the degree of clinical exposure, support offered during NGRNs' first year of practice, and the conditions of the workplace environment.

10.4.1 Clinical Experience

For HCPs in this study, experience in clinical settings is essential for preparing nurses for practice, and an area to improve on to achieve practice readiness. The value of clinical experience to the development of RNs is well known (Edward, Ousey, Playle & Giandinoto,

2017). Exposure to the practice of other professionals is necessary for clinical development (Benner, 1984). Clinical experience placements are an essential feature of UGN programs that develop a nurse's competence and confidence (Ford et al., 2016; Henderson, Cooke, Creedy & Walker, 2012). Pre-registration clinical practice provides UGNs with authentic clinical experiences necessary to develop role-relevant knowledge, behaviours and skill acquisition (Henderson et al., 2012), and facilitate teamwork and professional and workplace socialisation (S. Walker et al., 2014). Hands-on clinical experience and repetition of skills improves confidence and contributes to critical thinking (Romyn et al., 2009). When facilitated and supported effectively, relevant experiential learning in the workplace leads to deeper, more meaningful learning that supports ongoing professional development (Edward et al., 2017; Ford et al., 2016).

HCPs in this study suggested the quantity and quality of clinical experience need to increase to improve practice readiness. Researchers have suggested the amount of pre-registration clinical experience is inadequate to prepare NGRNs for the workplace environment, patient management and the complexity of the RN role (Hegney et al., 2013; Romyn et al., 2009). Deficits in NGRNs' clinical skills and overall performance also suggest that pre-registration clinical experiences may not be adequate (Brown & Crookes, 2016b; Missen et al., 2015, 2016b) and NGRNs are said to lack quality and quantity of clinical experiences to effectively merge theory with practice and develop competence (Missen et al., 2015). Further, NGRNs have reported feeling a 'disconnect' between what is taught about nursing at university and practised as a RN in the clinical setting, citing the need for more clinical exposure to improve this situation (Ankers et al., 2018, p. 321).

A consistent debate relates to the lack of consensus on the amount of hours required for effective clinical placement experiences (Edward et al., 2017). The *Registered Nurse Accreditation Standards* in Australia require a minimum of 800 hours of clinical practice (ANMAC, 2012). Discrepancies exist with the international context (Dobrowolska et al., 2015): for example in England the minimum is 2,300 and in the US, 1,000. The 800 hours allocated for clinical placement experiences in Australia were mandated at the time of transition of nursing education from hospital to tertiary institutions in 1985. How this amount was determined and evidence to validate the number of hours remains unclear (Ralph et al., 2017).

In Australia, the ability to accommodate additional clinical experience placement in UGN programs would be difficult without extending the length of the program (Christiansen et al., 2018). Current programs are already pushed to incorporate the necessary knowledge RNs require for contemporary practice with suggestions that they already lack key content to meet contemporary healthcare needs (Ralph et al., 2014). A significant amount of change in healthcare demand, reform and RN responsibilities has occurred since 1985 (Christiansen et al., 2018). Changes include the capability to work collaboratively and autonomously with diverse HCPs and consumers in varied clinical settings, organisations and geographic contexts; manage advancing technologies, treatments and complex care needs; and cope with and adapt to unpredictable change and difficult workplaces (Christianson et al., 2018). Minimal reform to the current model of nurse education has meant that the need for additional knowledge and practice has not been met. There is therefore an impetus to review clinical experience placements to determine if and how they can be improved.

HCPs in this study found the consolidated continuity of the final 6-week clinical practicum cultivated higher levels of practice readiness. This increased NGRN's familiarity with the healthcare team and environment and meant NGRNs were better able to adapt and manage their responsibilities on entry to practice. These findings concur with those of Kaihlanen, Salminen, Flinkman and Haavisto (2018) whose exploration of the impact of final clinical practicum experience on NGRNs' preparation and transition indicates that these placements offer the opportunity to develop comfort, confidence and competence with aspects of the RN role and working in the clinical environment. Providing the opportunity for UGNs to gain experience in how to cope with responsibilities gives them confidence in managing this as an NGRN (Kaihlanen et al., 2018). Similar findings are also associated with block clinical placement models where consolidated time in a clinical area can stabilise a UGN's presence as part of the healthcare team in the clinical environment (Birks, Bagley, Park, Burkot & Mills, 2017; Henderson et al., 2012). The continuity of longer block clinical placements can offer more focused learning (Birks et al., 2017) and Levett-Jones, Lathlean, Higgins and McMillan (2008) found that longer timeframes offer a settling in period that helps UGNs build relationships with staff and establish a sense of belonging that augments greater learning opportunities. Because of longer placements, staff trust an UGN's ability to work in the environment and offer greater responsibility, which improves their confidence (Birks et al., 2017), an essential factor for practice readiness.

A focus of contention in this study was related to UGN assessment processes. HCPs suggested a reduction of task-related assessments to encourage more holistic learning practice that better mirrors the role of the RN. HCPs found that NGRNs focus on completing tasks and are not encouraged to interact and initiate dialogue, question, reflect and inquire about nursing practice. Henderson et al.'s (2012) study of the clinical learning environment indicated that nursing cultures also tend to focus on teaching tasks with UGNs. Focusing on tasks means that learning is concentrated on transmitting knowledge rather than facilitating deeper learning, critical thinking and greater involvement in holistic clinical practice (Henderson et al., 2012).

Assessments and the goals of placement are designed by the university and based on the UGN curriculum. While an accreditation requirement, HCPs may have little input into these processes (Henderson, Briggs, Schoonbeek Paterson, 2011; Nabavi, Vanaki & Mohammadi, 2012). HCPs predominantly engage with students on placement to complete assessments tasks and achieve the goals of higher education providers. Therefore, the responsibility for the outcomes can be displaced to the education sector. Developing clinical placement goals and assessments that encourage integration and holistic nursing care in partnership with clinical partners would engender a collective understanding of the goals and joint responsibility for achieving outcomes that can avoid displacing accountability. El Haddad's (2016) study of practice readiness also concluded that a contributing factor to the disparity in ensuring NGRNs are practice ready relates to a lack of recognition of the shared responsibility in the education of new nurses. Partnerships between the education and practice sectors based on reciprocity could provide for mutually beneficial outcomes in all sectors and for NGRNs (Henderson et al., 2011; Patterson, Boyd & Mnatzaganian, 2017). When students engage in clinical placement with goals and assessments developed in conjunction with HCPs, teaching and learning experiences become more effective and meaningful. Having reciprocal input to clinical placements strengthens the conceptual alignment between theory and practice and informs the goals and responsibilities of industry and university that could improve practice readiness (Patterson et al., 2017).

Effective clinical experience need not be contained to the formal curriculum. This study also found that clinical experience gained through paid employment in healthcare positions enhanced NGRNs' practice readiness. Together with formal clinical placements, this exposure augments clinical competence by providing experiences for learning and working in the healthcare environment. This all-inclusive experience of nursing collectively enhances

practice readiness, a finding supported by Edward et al. (2017) who report that together both types of clinical exposure could increase a NGRN's overall readiness for practice. HCPs in this study explained that NGRNs with paid employment experience function more efficiently because of their familiarity with the workplace and staff, have sound foundational practice and authentic experiences of being valued, responsible team members. Phillips, Kenny, Smith and Esterman (2012) and Romyn et al. (2009) also found that NGRNs with paid employment experience function more competently and efficiently in clinical practice, while other studies suggest that these experiences improve NGRNs' overall transition (Budgen & Gamroth, 2008; Kenny, Nankervis, Kidd & Connell, 2012).

As employees, staff are more likely to view UGNs as team members and invest more time to support their learning (Budgen & Gamroth, 2008; Kenny et al., 2012). Budgen and Gamroth (2008) explain that cooperative placement models, where UGNs are employed in healthcare settings as part of their UGN education, improve practice readiness by developing their clinical judgment and time management. These models contribute to NGRNs' ability to work more confidently and, consequently, safely and efficiently (Budgen & Gamroth, 2008). Malouf and West (2011) also found these experiences enhance a NGRN's sense of belonging, a factor known to facilitate socialisation and transition processes. A NGRN's subsequent enculturation to the workplace is smoother because these factors are established (Kenny et al., 2012; Malouf & West, 2011).

While paid employment can improve skill acquisition and support a NGRN's transition to practice, not all NGRNs with this experience have these outcomes (Jacob, McKenna & D' Amore, 2014; Missen et al., 2015). In some instances, NGRNs that have been ENs have more challenging adjustments to their new RN responsibilities and may need additional support (Jacob et al., 2014; Missen et al., 2015). Phillips et al. (2014) caution against making assumptions about the competence of NGRNs with this experience to ensure these NGRNs are offered the right support. These factors emphasise the need for accurate assessments of readiness and for support to be tailored to a NGRN's needs. Kenny et al. (2012) also caution about the risk of UGN paid employment being perceived as a return to the apprenticeship model of education or being used as 'cheap labour' (p. 604). Avoiding this situation relies on how these models are aligned and integrated with an UGN's education. Salamonson, Everett, Koch, Andrew and Davidson (2012) explored the impact of paid employment on academic performance, suggesting that to maximise outcomes, these placements need to be approved by faculty staff and include distinct learning outcomes. This study would suggest that developing

approaches such as these is done in partnership with employers to ensure equity in understanding and responsibility for outcomes.

10.4.2 Structured Support

HCPs in this study acknowledged that NGRNs undergo a significant period of adjustment and development during their first year of practice that requires support. Findings indicated that NGRN transition programs are essential for enhancing a NGRN's practice readiness; however, to be effective, the aims, content and support need to be structured and aligned with NGRNs' needs and known phases of transition (Duchsher, 2009) and learning and development (Benner, 1984).

NGRN transition programs are the foremost effective strategy for supporting the first year of practice (Adams & Gillman, 2016; Africa, 2017; Bakon et al., 2018, Cubit & Ryan, 2011; Missen et al., 2014b; Rush et al., 2013; Ulrich et al., 2010). Outcomes of these programs can include improvements in NGRNs' competence, role clarity and job satisfaction (Bakon et al., 2018; Bull, Shearer, Phillips & Fallon, 2015; Spector et al., 2015; Tyndall, Firnhaber & Scott, 2018) turnover and retention (Jones et al., 2017; Rush et al., 2013; Ulrich et al., 2010) patient safety and patient outcomes (Jones et al., 2017; Spector et al., 2015; Tyndall et al., 2018). These factors equate to substantial cost savings for healthcare organisations (Duffield, Roche et al., 2014; Roche et al., 2015; Rush et al., 2013) and NGRNs generally describe transition programs as a positive, supportive aspect of their first year of practice (Ankers et al., 2018; Walker et al., 2017)—a comment voiced by HCPs in this study.

Globally, however, NGRN transition programs exhibit broad diversity and variation in names, duration, structure, content and staff support, which can undermine the success of programs (Adams & Gillman, 2016; Bakon et al., 2018; Whitehead et al., 2013). In this study, program names and inclusions varied across case study sites, but consistency was evident in the length and type of inclusions—an outcome attributed to state government's framework for lifelong learning and development for nurses and midwives in Queensland (QH, 2011). In all cases, the programs were 12 months in duration and included variable orientation and supernumerary time, clinical rotations, preceptor support, education and formal feedback processes (Appendix 6). These reflect inclusions identified in the literature as being effective strategies to promote successful transition and work readiness (Ankers et al., 2018; Edward et

al., 2017; Phillips, Esterman & Kenny, 2015; Rush, Adamack, Gordon, Janke & Ghement, 2015; Walker et al., 2017).

Well-structured, evidence-based programs with organisational commitment have been found to achieve the most successful outcomes (Bull et al., 2015; Spector et al., 2015; Tyndall et al., 2018). In a multi-site study of hospital-based transition programs Spector et al. (2015) compared the outcomes of formal, structured residential programs with other informal programs. Spector et al. (2015) found that established, well-structured programs that could be individualised to the clinical area with staff and educational support resulted in higher job satisfaction, increased retention, fewer patient errors and higher, safer levels of NGRN competency. Debate exists about program timeframes; however this study and many others indicate that 12 months is necessary for NGRNs to move through the stages of transition and development that they are known to experience on entry to practice (Bakon et al., 2018; Benner, 1984; Cochran, 2017; Duchscher, 2008, 2009; Dyess & Sherman, 2009; Newton & McKenna, 2007). A 12-month timeframe is also associated with improved job satisfaction and retention of NGRNs (Walker et al., 2017).

Findings from this research indicate that clear program aims are needed to establish shared goals and realistic expectations of performance that will ultimately provide structure, continuity and stability for the NGRN and the organisation (Bakon et al., 2017). NGRNs require different levels of support at different stages of their development. Aligning the structure of the program to accommodate NGRNs' transition and development processes ensures they receive the right support at the right time and scaffolds learning and development to progressively build capability. Scaffolding learning leads to deep, meaningful learning, which brings about the gradual acquisition of new capabilities and long-lasting change (Cadorin, Bagnasco, Rocco & Sasso, 2014). Meaningful learning is an active build-up process whereby new knowledge is acquired, interpreted and assimilated with past knowledge to create deeper levels of comprehension, thinking and action (Cadorin et al., 2014). This level of learning is necessary for the acquisition of complex capabilities for the provision of safe, quality care (Cadorin et al., 2014). Meaningful learning promotes the conceptual understanding necessary for critical thinking and clinical reasoning—fundamental capabilities that enable theory to become practice. Meaningful learning also equips NGRNs with the ability to understand how to learn and thus engenders self-directed learning (Cadorin et al., 2014), a capability necessary to ensure continuing education as a professional requirement for all RNs (NMBA, 2016c).

HCPs described 3–4 months as the critical point in establishing a NGRN's confidence in clinical practice, a finding supported by NGRN transition theories (Duchscher, 2008, 2009; Kramer, 1974). NGRNs should therefore be offered 4–6-month clinical rotations to build their confidence and scaffold their growth and development. Moving a NGRN prior to this point can undermine the development of their confidence, which may reinforce the perception that NGRNs are unable to cope with the work (Walker et al., 2017). Studies indicate that constant change with frequent rotations can induce additional stress that destabilises a NGRN's confidence, learning and socialisation (Malouf & West, 2011; Walker et al., 2017)—factors that can potentiate NGRN attrition. According to Walker et al. (2017) multiple rotations can reinforce a NGRN's beginning status, where they constantly need to relearn how to work in unfamiliar environments. NGRNs take up to 3 months to feel comfortable in a unit (Walker et al., 2017) and establishing meaningful relationships and being accepted as part of a social group is a measure of success for NGRNs (Malouf & West, 2011). Constant rotation 'accentuates the importance for fitting in', which can undermine a NGRN's sense of belonging in the healthcare team (Malouf & West, 2011, p. 491)—factors that can be a barrier to optimal performance (Freeling & Parker, 2015) and as finding from this study reveal, inhibit the learning and development necessary for practice readiness. With each clinical rotation, tailored organisational and unit-based orientation was identified as an important strategy in this study to enhance NGRNs' industry and professional readiness. This finding supports that of Phillips et al. (2015, p. 118) who described 'enduring and continuous orientation' as necessary to support a NGRN's familiarity with an organisation and their role as a RN. Rush et al. (2015) also found that orientation and supernumerary time decreases turnover and increases job satisfaction of NGRNs.

Findings of this research suggest that commencing practice in a general area before moving to advanced areas of specialised practice is necessary to scaffold and support NGRNs' progressive learning and development. This sequence enables time for NGRNs to develop confidence and establish the foundational capability needed for advanced practice (Benner, 1984). Studies have found that NGRNs do not have the academic preparation for practice in specialty area such as critical care, emergency (Baumberger-Henry, 2012) or MH (Procter et al., 2011) and working in specialty areas can add additional stress for NGRNs (Cubit & Ryan, 2011; Walker et al., 2017). Specialty area practice requires specific capability that is above that of a general RN (International Council of Nurses [ICN], 2009). The ICN framework for specialist nurses indicates that general nursing practice is a prerequisite to specialist practice

even at a novice level where the RN requires general foundational capabilities on which to build their specialty-related capabilities (ICN, 2009). HCPs in this study indicated that NGRNs perform better in specialty areas after having established their confidence and consolidated their foundational practice, a finding reported previously by Phillips et al. (2014). For these reasons Phillips et al. (2014) suggest that clinical rotations to specialty areas occur as a second or third rotation. This is further supported by research that indicates that at 6 months, while a NGRNs' confidence stabilises, job satisfaction can decrease before stabilising at 12 months (Rush et al., 2013; Ulrich et al., 2010). Introducing new responsibilities, learning opportunities and mentoring associated with career direction can help to maintain development and motivation; thus, this is an optimal time to introduce work in specialty areas of practice.

While evidence suggests a graded introduction to specialist practice, this study demonstrates that not all NGRNs can initially be employed in a general area. Further, some NGRNs aim to work in specialty areas. Specialisation in healthcare is growing and, given the required level of capability for such practice, Dyess and Sherman (2009) recommend specific support be designed for specialty areas. This reflects the approach used by HCPs in this study where programs were adjusted or specifically designed for this purpose, which has shown success in specialised areas (Aggar, Bloomfield, Thomas & Gordon, 2017; Bortolotto, 2015; Halfer, 2008; Juers, Wheeler, Pascoe, Gregory & Steers, 2012) including for NGRNs commencing in rural contexts (Ostini & Bonner, 2012). Ostini and Bonner (2012) found that NGRN programs in a rural setting can help with transition; however flexibility is needed to adjust programs to clinical and locational needs while retaining the overall structure. Similarly, Fowler, Twigg, Jacob and Nattabi's (2018) review of rural and remote programs in Australia emphasises the need for structured programs with the flexibility to meet the unique educational and socialisation needs of nurses transitioning in rural and remote contexts. Ostini and Bonner (2012) reported that all participants in their study gained employment in the rural facility with a view to continuing their rural practice, highlighting the value for career planning and progression. In the current study, HCPs prioritised certain capabilities for practice readiness in rural and specialty contexts and tailored NGRN programs to reflect and accommodate these priorities and needs.

Tailoring such programs and support is important. As findings from this study indicated, NGRNs enter the workplace with different levels of practice readiness requiring different

levels of support that change with their development. In addition, HCPs have different needs of NGRNs in different contexts of practice. Addressing a NGRN's individual needs generates more effective transition outcomes that can enhance their confidence, competence and adaptation to their new role (Edward et al., 2017; Fowler et al., 2018; Phillips et al., 2015). The program evaluation in the study by Phillips et al. (2015) highlights the importance of including individualised support for NGRNs that Fowler et al. (2018) contend creates a more effective learning environment for NGRNs. Effective support relies on the availability of individuals with the educational capability to establish positive relationships that facilitate meaningful learning (Edward et al., 2017; Fowler et al., 2018).

In this study, available and approachable NEs and well-prepared preceptors were identified as being instrumental in promoting a NGRN's practice readiness. These findings are consistent with those of Edward et al. (2017) that achieving successful outcomes in NGRN work readiness is reliant on the quality and availability of support offered. Well-prepared support persons are approachable and make a difference to a NGRN's confidence, socialisation and independence (Edward et al., 2017). Similarly, Ankers et al. (2018) found that NGRNs credited approachable, educationally prepared staff with helping them understand their transition responsibilities and find meaning and commitment to the RN role.

While NGRNs require the support of experienced clinicians to develop their clinical and professional capability (Benner, 1984), quality of teaching is paramount for effective, meaningful learning (Gaberson, Oermann & Shellenbarger, 2015). Having educational knowledge and time enables support persons to facilitate meaningful learning, respond effectively to questions and provide encouraging, constructive feedback—a factor identified in this study as necessary for NGRNs' development. Giving feedback is a learned skill that is necessary to affirm and extend clinical and professional practice (Sweet & Broadbent, 2017). When done effectively, feedback strengthens capability and internal drive to progress, which leads to significant performance development (Sweet & Broadbent, 2017). Transition experiences are rated as more positive and competence levels higher by NGRNs who experience effective preceptor support (Blegen et al., 2015; Tyndall et al., 2018). Having support and guidance in the early stages of a NGRN's employment is crucial to their transition (Ankers et al., 2018; Ashton, 2012; Duchscher, 2009; Phillips et al., 2015). The use of dedicated, skilled support persons can tailor the NGRN's learning requirements and help minimise impacts on staff workloads, particularly when intensive support is required for NGRNs. Henderson, Ossenberg and Tyler (2015) also found that dedicated staff were

necessary to provide opportunities for moral support to discuss conflict, feel safe and practice skills. Edward et al. (2017) stresses that preceptors need to be supported to fulfil their role and maximise the potential to facilitate work readiness. Blegen et al. (2015) compared NGRNs' preceptor experiences in 82 hospitals and found organisations that support preceptors achieve higher levels of NGRN competence and retention. These factors heighten the need to ensure RNs filling preceptor roles are adequately prepared and supported.

This research also indicated that regular education, particularly simulation activities, enhances NGRNs' practice readiness. Regular educational opportunities that include simulation and hands-on practice potentiate a NGRN's clinical development (Romyn et al., 2009; Rush et al. 2013; Walker et al., 2017). Dedicated study days aimed at developing specific skills including critical thinking and leadership, consolidating old and introducing new capabilities, can increase a NGRN's confidence and capability for independent practice (Henderson et al., 2015). Henderson et al. (2015) report that regular education provides an opportunity for NGRNs to confidentially debrief. This facilitates NGRNs' management of challenging personal and professional situations tat can distress NGRNs. HCPs in this study often described scenarios where NGRNs needed this type of additional support time to deal with conflict, particularly that stemming from uncivil workplace behaviours.

A key concern emphasised by HCPs seeking practice readiness was to ensure patient safety and NGRN transition programs were seen as necessary for this purpose. Tyndall et al. (2018) review 20 studies to ascertain the association between NGRN transition programs, patient safety and positive patient outcomes. While findings reveal a lack of evidence for a direct impact on patients, participation in these programs improve NGRNs' competence in capabilities that promote patient safety, such as communication, organisation and prioritisation skills; critical thinking and clinical decision making; and leadership (Tyndall et al., 2018, p. 22). Tyndall et al. (2018) caution, however, that achieving productive outcomes from NGRN transition programs requires funding and organisational commitment for success. In risk-averse, cost-efficient healthcare environments, strategies that improve patient safety and cost savings attract financial and organisational support. Tyndall et al. (2018) recommend improvements in program evaluations to determine specific outcome measures associated with NGRNs' competence and patient safety to motivate organisational investment in NGRN transition programs.

10.4.3 Professional Internship

The preceding discussion supports the significant impact a NGRN's first year of practice has on their development and success as a RN. Practice in the professional role affords NGRNs the opportunity to develop the necessary capabilities of competent RNs, making this an essential part of RN education. These findings concur with Holland et al. (2010) who, following the evaluation of fitness for practice in Scotland, stated that nurse registration is the beginning of a NGRN's learning and development as an RN. The first year of practice begins the process of personal and professional development where new nurses build confidence and capability through experience in their new role (Holland et al., 2010). Holland et al. (2010) argue that a period of preceptorship-supported practice is essential to accommodate this development. Similarly, in an Australian study, Brown and Crookes (2016a) state that on registration, NGRNs continue to develop their practice as they consolidate their learning. NGRNs learn first-hand the complex interplay of nursing knowledge and practice in the role of the RN. According to Benner (1984), new nurses develop their level of clinical proficiency over time in practice with experienced clinicians who support the development process.

Barnett, Becher and Cork (1987) propose that effective professional preparation requires practice in the professional role to become independent and decisive and to understand the responsibilities and implications associated with that role. Healthcare professions such as pharmacy, medicine, psychology, occupational therapy and physiotherapy address the need for this professional experience with a regulated year of practice (Devenish, 2014; Mason, 2013). A common model in each of these healthcare professional programs is the requirement to complete a 1-year internship with provisional registration and final exam as part of the degree program leading to registration (Devenish, 2014; Mason, 2013). For example, on completing their medical degree program, medical graduates receive provisional registration and enter the workforce in a structured, regulated 12-month internship aimed at accommodating and supporting their learning to become qualified (Medical Board of Australia, 2016). In the US, in recognition of the need for professional practice, the Institute of Medicine (IOM) (Benner et al., 2010) advocate for 12-month nurse residency programs, including financial and professional support for their implementation. Outcomes from these programs demonstrate their effectiveness in supporting NGRNs' development, professional socialisation and retention (Spector et al., 2015; Ulrich et al., 2010).

NGRNs need time to develop confidence, consolidate their learning and build their capability (Brown & Crookes, 2016a; Missen et al., 2016a; Walker et al., 2017). Developing nursing capability is an ongoing process of learning that begins with a nurse's education and is expected to continue throughout their professional life (Benner, 1984; NMBA, 2016b). Christianson et al. (2018) argue that the model and duration of current BN programs cannot accommodate the development of capabilities RNs require to address the range and depth of current and future healthcare change. Addressing this deficiency would necessitate a redesign and extension of the current Australian BN program. Christianson et al. (2018) suggest that the BN program be reviewed in light of current and future needs, with a potential to extend the duration of the program to 4 years. Findings from this study support this proposal with steps to regulate and mandate NGRNs' first year of practice as part of the BN program. A structured, evidence-based program of support augmented with the undergraduate degree program creates a transition continuum, one that recognises that becoming a RN begins on day one of a nurse's education and continues to the end of their graduate year.

10.4.4 Workplace Environment

NGRN programs and transition are contingent on the conditions within the workplace environment (Evans et al., 2008; Kramer et al., 2011; Laschinger et al., 2009; Rush et al., 2013). Findings from this study support this and indicate that NGRNs in healthcare settings where leaders and healthcare teams create supportive positive workplace conditions experience more productive learning that foster practice readiness. Similar findings are reported from research related to positive, healthy workplace environments (HWEs) (Dawson et al., 2014; Kramer et al., 2011). Kramer et al. (2011) investigated NGRN outcomes in hospitals over their first 12-month period of employment and found the practice environment was 'the single most significant variable affecting new graduates' transition' (p. 376). Kramer et al. (2011, p. 350) describe healthcare environments as 'complex interactive systems' where an individual's performance can be affected by the physical, social, cultural and organisational conditions present in the environment. HWEs have leaders that collaborate with staff, provide resources and processes to facilitate quality patient care, and promote positive workplace cultures that support professional development (Kramer et al., 2011). These environments engender positive NGRN transition experiences that foster competence and confidence, job satisfaction and improved retention (Dawson et al., 2014; Kramer et al., 2012; Laschinger, Wong & Grau, 2012). According to Kramer et al. (2011), HWEs temper NGRNs' perception of transition anxieties and the degree of ERS. Studies exploring the

challenges NGRNs experience in their first year of practice also indicate a supportive, welcoming and encouraging environment where staff facilitate learning and socialisation best supports NGRNs' progress (Cubit & Ryan, 2011; D'Ambra & Andrews, 2014; Phillips et al., 2015; Rush et al., 2013; Walker et al., 2017).

The quality of the leadership within the workplace is found to influence the workplace culture (Boamah, Read & Laschinger, 2016; Duffield, Roche, Blay & Stasa, 2011). HCPs in this study explained that the healthcare teams in these environments were a reflection of the manager, particularly NUMs, and when these individuals encourage learning and embrace NGRNs, healthcare teams are equally as supportive. Leaders who are well connected with their staff foster high-functioning teams that are respectful to each other and to newcomers (Kaiser, 2017; Kramer et al., 2011). Authentic, transformational leaders, who cultivate respectful relationships and engender collegial teams, empower staff and support learning (Dawson et al., 2014; Kramer et al., 2011; Laschinger, Wong et al., 2012). Effective leadership is necessary for establishing relationships that encourage nurses to voice concerns and ask for help (Paterson, Henderson & Burmeister, 2015), which HCPs in this study suggested NGRNs need to develop safe practice. Effective leaders are also associated with the retention of higher numbers of skilled staff (Wong, 2015) and skilled staff are necessary for facilitating NGRNs' clinical and professional development.

A concerning find in this study was the prevalence and impact of negative interactions on NGRNs in the workplace. HCPs perceived these to be a key factor inhibiting NGRNs' optimal performance, as previously suggested by Parker et al. (2014). The negative interactions HCPs described in this study resemble behaviours associated with incivility and bullying (D'Ambra & Andrews, 2014; Hunt & Marini, 2012). These behaviours are often insidious, of low intensity and violate the central tenets of mutual respect (Vagharseyyedin, 2015, p. 118). Uncivil interactions are impolite and disrespectful, convey a lack of regard, intimidate or harass others (D'Ambra & Andrews, 2014; Lynette, Echevarria, Sun & Ryan, 2016) and include covert criticisms and belittling in the presence of others (Vagharseyyedin, 2015). Incivility and bullying can cause significant physical and physiological distress, diminished self-efficacy, burnout and attrition (D'Ambra & Andrews, 2014; Hartin, Birks & Lindsay, 2018). Incivility contributes to lower standards of care where high levels of stress, poor communication and lack of teamwork can lead to errors in patient care and even patient death (Edmonson, & Allard, 2013; Hartin et al., 2018; Laschinger, 2012; Lynette et al., 2016; Purpora, Blegen & Stotts, 2015;). Organisational costs increase because of poor performance,

loss of productivity (Hutton & Gates, 2008), job dissatisfaction (D'Ambra & Andrews, 2014) and staff turnover (Hayes et al., 2012; Laschinger et al., 2012; Vagharseyyedin, 2015).

Previous studies suggest that NGRNs are particularly vulnerable to uncivil behaviours because of their newness and unfamiliarity with the workplace environment, people and processes (D'Ambra & Andrews, 2014; Laschinger et al., 2009; Lynette et al., 2016; Sauer, 2012). Incivility coupled with workplace pressures can increase the shock NGRNs experience when entering difficult clinical environments (Kramer et al., 2011; Parker et al., 2014; Walker et al., 2017). Harmful consequences manifest as lowered self-esteem and confidence, feelings of isolation, mistrust of colleagues and management, increased levels of stress and anxiety, depression, emotional burnout and turnover (D'Ambra & Andrews, 2014; Laschinger et al., 2009; Viotti, Converso, Hamblin, Guidetti, & Arnetz, 2018). Uncivil behaviours can suppress, disrupt and inhibit NGRNs' learning (Hunt & Marini, 2012). This was evident in HCPs' descriptions of the outcomes for NGRNs in this study as being fearful of approaching difficult individuals to ask questions or seek help, which can compromise patient safety and learning. As HCPs in this study described, when NGRNs are intimidated, fearful and lose confidence, they may be practice ready but unable to perform to their level of competence because of these circumstances. A lack of confidence and competence is associated with lower levels of readiness, which can affect how they are supported and integrated in the workplace. NGRNs could also be perceived as a hindrance, which when conveyed to other team members, could attract further negative interactions.

Critical factors in cultivating HWEs that support NGRNs include organisational support and adequate skills mix (Dawson et al., 2014; Kramer et al., 2011, 2013). Economic and health reform measures, however, have introduced unprecedented constraints that have to led to a more competitive approach in managing resources, where cost and efficiency have become a key focus of education and healthcare, including the development of the healthcare workforce (Mason, 2013). Organisational inefficiency, constant restructuring, staffing and financial constraints can result in staff feeling pressured, oppressed or disempowered, which can pre-empt and perpetuate workplace incivility (Sauer, 2012; Vagharseyyedin, 2015; Viotti et al., 2018) and manifest in bullying behaviours (Sauer, 2012; Viotti et al., 2018). Healthcare professionals who are constantly exposed to chaotic and stressful conditions can be more susceptible to using uncivil behaviours (Hunt & Marini, 2012; Sauer, 2012). Increasing workplace pressures without concomitant staffing and resources can lead to negative attitudes

and job dissatisfaction that, if left unaddressed, perpetuate incivility and attrition (Dawson et al., 2014; Hunt & Marini, 2012; Vagharseyyedin, 2015).

In Chapter 5 and 6, the context of practice for HCPs reflected many of the challenges experienced in contemporary healthcare contexts in Australia. HCPs in this study suggested that supporting NGRNs in such environments is difficult and sometimes frustrating because of workplace conditions. In addition, NGRNs initially lack the capability for independent practice, which, when coupled with high workloads can lead staff to convey their frustrations in their interactions with NGRNs. Viotti et al. (2018) suggest that fostering organisational efficiency by developing the leadership capability of frontline managers, could improve co-worker incivility (p. 7).

Healthcare facilities with good leadership, nurse staffing, manageable workloads and adequate educational support have more positive, collaborative work environments, lower staff turnover rates and improved patient outcomes (Aiken, Clarke, Sloane, Lake & Cheney, 2008; Aiken et al., 2014; Dawson et al., 2014; Purdy, Laschinger, Finegan, Kerr & Olivera, 2010; Twigg et al., 2012). As discussed, nurses including NGRNs leave the profession because of poor workplace conditions that lead to personal and professional distress, job dissatisfaction and burnout. The retention of a capable, satisfied and stable nursing workforce is critical for cost-efficient healthcare and high-quality patient care and safety. NGRN practice readiness and quality learning experiences rely on clinical environments supporting their learning and development (Ford et al., 2016; Henderson et al., 2011). For meaningful learning and development that augments practice readiness, the learning environment needs to foster a culture of learning. Kramer et al. (2011, p. 350) contend that now is the time to shift focus from improving issues of role transition to the impact of the environment in mitigating transition issues. Findings from this study support this contention.

10.5 Chapter Summary

This chapter has discussed the findings of this study in the context of the literature. The impact of the context on HCPs' understanding of NGRNs' practice readiness and how this drives their needs and expectations of NGRNs' performance was discussed. The capabilities HCPs suggested that NGRNs require for practice readiness and what this means in the broad context of nurse education, regulation and practice were explained. Factors identified as cultivating practice readiness were then examined. The next and final chapter reflects on this

study, summarises the findings as they align with the research questions and presents the implications and recommendations from this research for education, policy, practice and future research.

Chapter 11: Conclusion

11.1 Introduction

The aim of this study was to define NGRN practice readiness from the perspective of Australian HCPs and explain the process by which a NGRN is determined to be practice ready. Throughout the preceding chapters the research design and process used to address this aim was explicated and the findings presented and discussed in the context of wider literature. This final chapter concludes the thesis and begins with revisiting the purpose of this research and the findings in relation to the research questions. An evaluation of the research to establish the quality of the findings is then presented. The implications and recommendations arising from this research with suggestions for future research and study limitations complete the chapter.

11.2 Revisiting the Study Purpose

The purpose of this study was to examine NGRN practice readiness from the perspective of four groups of HCPs, in four different geographic locations in Australia. Through this research, the capabilities NGRNs require for practice readiness were identified along with an explanation of how HCPs determine practice. The needs of HCPs and NGRNs were established and factors that enhance practice readiness clarified. Collectively, these findings inform recommendations about how practice readiness of NGRNs in Australia can be improved. The following section revisits the initial research aim, questions and design and aligns the key findings to the four research questions in this study.

11.2.1 Research Aim

The aim of this research was to define NGRN practice readiness from the perspective of Australian HCPs and explain the process by which a NGRN is determined to be practice ready.

11.2.2 Research Questions

1. How do HCPs define NGRN practice readiness?
2. What factors influence how HCPs perceive and determine NGRN practice readiness?
3. How do NGRNs demonstrate practice readiness?

4. How do HCPs' interactions with NGRNs affect NGRNs' ability to demonstrate practice readiness?

11.2.3 Research Design

A collective instrumental case study design (Stake, 2006) was used to enable an in-depth understanding of a topic within the context of which it presents. Purposive and snowball sampling was used to select the cases and data collection involved semi-structured interviews, a focus group, document review and the generation of field notes and memos. Data from each case were analysed individually then collectively across cases, using selected grounded theory methods of analysis. Findings from each case were integrated and interpreted against the research questions. The findings are summarised in Table 29 with the corresponding research questions addressed by each finding.

Table 29: Major categories with corresponding research questions and thesis chapters

Chapter	Major category	Subcategory	Research question (RQ)
6	Dominance of context	• *Healthcare system and environment* • *People and the quality of workplace interactions*	RQ: 2 RQ: 4
7	Defining practice readiness	• *Multidimensional readiness* • *Confidence underpins performance*	RQ: 1 RQ: 2 RQ: 3
8	Determining practice readiness	• *The assessment continuum* • *Assessment outcomes*	RQ: 1 RQ: 2 RQ: 3
9	Developing practice readiness	• *Transition continuum* • *Right environment to flourish*	RQ: 2 RQ: 4

11.3 Evaluating the Quality of This Case Study

In this section, the research described in this thesis is evaluated to verify the credibility of the findings. The research rigour and quality are discussed and the process and product of the research evaluated.

11.3.1 Research Rigour and Quality

In case study, as with other qualitative research, mechanisms must be employed to safeguard the quality and rigour of the research and these must be evaluated to achieve this aim. Verification of the credibility of the findings needs to occur. In establishing credibility, an evaluation of both product and process is necessary (Birks & Mills, 2015; Creswell, 2013; Morse, 2015). A range of approaches was considered for evaluating the processes and product of this study. Some approaches were methodologically specific (Birks & Mills, 2015; Hyett, Kenny & Dickson-Swift, 2014; Luck et al., 2006; Stake, 1995, 2006; Yin, 2014) while others were approaches that apply to all qualitative research (Birks, 2014; Lincoln & Guba, 1985; Miles et al., 2014; Tracy, 2010). While no approach can provide an absolute guarantee of accuracy and appropriateness, Rolfe (2006) suggests all have merit with no one approach being more effective than another. Morse (2015) cautions that there is a level of subjectivity involved when the researcher evaluates their own study and that researchers need to verify evaluation outcomes carefully. Stake (2006) advises that when researching from a constructivist philosophy, there is an awareness that no two people construct and interpret knowledge in the same way. The writer will not be able to control the reader's interpretations, but has a responsibility to reduce the likelihood of misinterpretations and enable informed judgments about the credibility of the findings. Therefore, careful attention to documenting the research processes is vital (Stake, 2006).

A range of strategies was employed in this study to ensure quality and rigour. These were documented throughout this thesis. Assuring a measure of understanding to evaluate a case study involves using meticulous well-documented processes, thick descriptions and persuasive evidence, and strategies to verify findings (Stake, 2006; Yin, 2014). Morse (2015) suggests that to achieve rigour, one must pay close attention to the research processes employed for data collection and analysis. Creswell (2013) suggests that researchers document the accuracy of their study using accepted methods or 'validation strategies' (p. 250) that can then be assessed for quality and rigour. Creswell (2013) identifies eight strategies, recommending researchers use a minimum of two in any one study. Of those that Creswell (2013) suggests, six strategies were employed in this research: prolonged engagement and persistent observation in the field; triangulation; peer review or debriefing; clarifying researcher bias; member checking; and rich. think description. For qualitative research, Lincoln and Guba (1985) propose specific techniques similar to those suggested by Creswell (2013) to establish the trustworthiness of a study as a means of achieving quality

and rigour. Lincoln and Guba's (1985) traditional criteria and a case study-specific criterion developed by Hyett et al. (2014) were chosen to evaluate this study with the aim of ensuring the processes and product were evaluated from the perspective of both the paradigm and methodology from which it was designed. The models are discussed in the following section.

11.3.2 Evaluating the Process and Product

Lincoln and Guba (1985) propose four criteria that aim to evaluate the trustworthiness of qualitative research during and upon completion of a study. Trustworthiness according to Morse (2015) is akin to rigour. Establishing trustworthiness requires an evaluation of the credibility, transferability, dependability and confirmability of the research (Lincoln & Guba, 1985). *Credibility* evaluates if the findings of the research are a plausible, authentic interpretation of data that aligns with the participant's views and resonates with the views of others engaged with the findings. Miles et al. (2014) refer to credibility as 'truth value' (p. 312). *Transferability* evaluates whether the research findings are transferable to other contexts or 'fit' with other settings (Miles et al., 2014). The researcher needs to create a 'vicarious experience' for others to make their own judgment or 'naturalistic generalisation' about the meaning and value of the research to their reality (Stake, 1995, p. 85). *Dependability* evaluates whether the research processes are stable and consistent, and logical and visible so that another researcher using the same processes would reach similar results or consumers of the research can make comparable conclusions (Lincoln & Guba, 1985). This relies on transparent, explicit and logical documentation of the study's methods and decision-making process in a way that opens the research process for audit (Denscombe, 2014). *Confirmability* aims to establish techniques to verify that the findings are grounded in the data and shaped by participants rather than the researcher (Lincoln & Guba, 1985). This calls for the researcher to ensure the audit trail is transparent and coherent and that a reflexive account of their influence and involvement in the research is explicated.

Lincoln and Guba (1985) align their constructs with those of quantitative research and propose techniques to meet each criterion. Although their criteria are not flawless, they have been consistently and effectively utilised within the qualitative research community and frequently recommended for evaluating qualitative research (Loh, 2013; Morse, 2015). The fundamental concepts and recommended techniques also align with those of others who have established relevant criteria to assess qualitative research (Creswell, 2013; Loh, 2013) and more specifically, case study research (Hyett et al., 2014; Stake, 1995; Yin, 2014). In Table

30, the four qualitative and corresponding quantitative criteria and techniques for meeting each criterion are presented and aligned to the techniques in this study.

Table 30: Lincoln and Guba's (1985) trustworthiness criteria and current research

Criteria	Techniques	Techniques in this research
Credibility (internal validity)	• Prolonged engagement • Persistent observation • Triangulation (sources, methods, researchers) • Peer debriefing • Negative case analysis • Referential adequacy (archiving of data) • Member checks (process and terminal)	• Field visits (5–8 days) • Observation of context • Triangulation (sources, methods) • Peer debriefing • Referential adequacy • Member checks: process
Transferability (external validity or generalisability)	• Thick description: establish relevance	• Thick description: case and findings • Purposive sampling: cases and participants; selection criteria
Dependability (reliability)	• Overlapping methods (triangulation) • Stepwise replication • Inquiry audit or audit trail Examine the process of the inquiry: how data were collected; stored; their accuracy	• Triangulation • Audit trail: consistent and systematic data collection, analysis, storage and maintenance.
Confirmability (objectivity)	• Confirmability audit: · Triangulation and audit trail processes · Examine the product to confirm the findings, interpretations and recommendations are supported by data	• Confirmability audit • Product examined to confirm the findings, interpretations and recommendations supported by data
All four criteria	• Reflexive journal (self and method)	• Field notes • Memos

The quality and rigour of this study was further verified using a case study-specific framework developed by Hyett et al. (2014) to critically analyse the methodological descriptions of case studies (p. 4). The framework (Table 31) draws upon established criteria to review both general and case study rigour (Creswell, 2013; Merriam, 2009; Stake, 1995). Addressing the questions within the framework enables assessment of both the processes and,

more specifically, the product of the research and prompts the appraiser to seek knowledge that addresses the credibility, dependability, confirmability and transferability of the research.

Two questions from the criteria of procedural precision in Birks and Mills's (2015) model for evaluating qualitative and grounded theory research have been added to the framework. These relate to the audit trail and data management and are important processes in case study research (Stake, 2006) and necessary to establish trustworthiness of the product (Lincoln & Guba, 1985). This inclusion aims to ensure the evaluation of these factors is explicit. Given the length of the completed evaluation, it is provided in Appendix 8 to avoid disrupting the continuity of the narrative in this chapter. The framework and corresponding chapter where evidence of meeting the criteria can be found in Table 31.

Table 31. Framework for assessing qualitative case study research

Relevant for all qualitative research	**Evidence**	
1. Is this report easy to read?	Thesis	✓
2. Does it fit together, each sentence contributing to the whole?	Thesis	✓
3. Does this report have a conceptual structure (i.e., themes or issues)?	Chapter 1–3; 11	✓
4. Are its issues developed in a serious and scholarly way?	Chapter 1–3; 10	✓
5. Have quotations been used effectively?	Chapter 5–9	✓
6. Has the writer made sound assertions, neither over nor under interpreting?	Chapter 4; 5–10	✓
7. Are headings, figures, artefacts, appendices, indexes effectively used?	Thesis; Forward pages; Appendices	✓
8. Was it edited well, then again with a last minute polish?	Thesis; Supervisor review Self & professional editing	✓
9. Were sufficient raw data presented?	Chapter 5–9	✓
10. Is the nature of the intended audience apparent?	Chapter 1; 3; 11	✓
11. Does it appear that individuals were put at risk?	Chapter 3; 4	✓
High relevance to qualitative case study research		
12. Is the case adequately defined?	Chapter 1; 3–5	✓
13. Is there a sense of story to the presentation?	Chapter 5–9	✓
14. Is the reader provided some vicarious experience?	Chapter 5–9	✓
15. Has adequate attention been paid to various contexts?	Chapter 1; 3–9	✓
16. Were data sources well-chosen and sufficient in number?	Chapter 1–4	✓
17. Do observations and interpretations appear to have been triangulated?	Chapter 3–4	✓
18. Is the role and point of view of the researcher nicely apparent?	Chapter 1; 5–9; 11; Prologue; Epilogue	✓
19. Is empathy shown for all sides?	Chapter 1; 5–10	✓
20. Are personal intentions examined?	Chapter 1; 4; Prologue; Epilogue	✓

Added from Merriam (2009)		
21. Is the case study particular?	Chapter 2; 3	✓
22. Is the case study descriptive?	Chapter 5–9	✓
23. Is the case study heuristic?	Chapter 5–9	✓
Added from Creswell (2013)		
24. Was study design appropriate to methodology?	Chapter 1; 3	✓
Added from Birks & Mills (2015, p. 148)		
25. Has the researcher indicated the mechanisms by which an audit trail was maintained	Chapter 1; 4	✓
26. Are procedures described for the management of data and resources	Chapter 3; 4	✓

Using Lincoln and Guba (1985) and Hyett et al.'s (2014) frameworks enabled a comprehensive evaluation of the quality and rigour of this research. As a novice researcher, this strengthened confidence in the credibility of the research findings in addition to developing a deeper understanding and appreciation for ensuring the integrity of research. As Birks and Mills (2015) propose, developing researcher expertise contributes to the quality and rigour of qualitative research.

11.4 Implications and Recommendations

The findings of this study highlight a number of factors related to NGRN practice readiness for Australian healthcare contexts. Understanding how HCPs define and determine a NGRN's practice readiness provides insight into the capabilities HCPs seek in NGRNs and factors affecting and supporting NGRNs' performance and progress. These have implications for those educating, governing, regulating and managing the development of RNs in Australia. In this section, the implications are discussed and recommendations to improve the preparation and practice readiness of RNs in Australia presented. The recommendations are summarised below in Table 32.

Table 32: Recommendations for education, practice, policy and research

Context	Recommendations
Education	**1.** Review UGN programs for the development of practice readiness and the relevant capabilities necessary for RNs in contemporary healthcare **2.** Review the quality and quantity of clinical placement experiences for UGNs **3.** Explore the use of a model of clinical experience that incorporates paid employment and clinical placement experience as part of UGN programs **4.** Develop reciprocal, mutual partnerships between education and practice sectors to augment the education of RNs
Practice	**5.** Develop reliable methods to assess NGRNs' level of practice readiness and competence in the workplace **6.** Develop a national evidence-based 12-month program for NGRNs that supports their personal and professional development and transition **7.** Prepare and support RNs as preceptors in the healthcare setting to effectively fulfil their role **8.** Make provisions for dedicated nurse education positions at unit level **9.** Invest in developing positive HWEs to promote and support collaborative learning and working
Policy	**10.** Develop federal, state and territory funding and policy commensurate with the needs of educational and practice sectors for the education of RNs **11.** Develop NGRN standards of practice that describe a novice level of practice for NGRNs and one that is achievable in the current model of nurse education **12.** Redevelop and extend the current model of nurse education to become a 4-year degree program that includes a professional internship for NGRNs
Research	**13.** Undertake a broader investigation into the domains of practice readiness across Australia and healthcare services **14.** Conduct research to establish the appropriate amount and type of clinical experience required to develop competent RNs **15.** Explore factors that contribute to positive workplace environments in Australia **16.** Investigate the development of a 4-year UGN program that incorporates a professional internship

11.4.1 Education

Nursing is a unique and complex profession that relies on the development of a breadth and depth of capability. UGN education needs to ensure students develop a depth of essential capabilities that prepare them to not only provide safe nursing care but also manage themselves and nursing care in complex environments. Findings from this study suggest a greater focus on development of NGRNs' personal readiness capabilities would improve a NGRN's professional and practice readiness and preparation for their transition. These are enduring capabilities that will support NGRNs to confidently provide safe efficient healthcare and adapt to manage the complexities, change and challenges of working in current and future healthcare contexts. It is also suggested that given the rapid change in healthcare, UGN programs be regularly evaluated for their alignment with the needs of contemporary healthcare and continually preparing NGRNs with relevant capabilities. Considering how the demand and variability in healthcare contexts can inform the education and preparation of RNs to be ready for practice will assist with this process.

Recommendation 1:	Review UGN programs for the development of practice readiness and the relevant capabilities necessary for RNs in contemporary healthcare

This research emphasises the importance of clinical placement experiences to the development of practice readiness and indicates that this area of nurse education needs to be strengthened. Consideration must be given to the need for adequate and relevant time in the healthcare setting to achieve a competent level of practice readiness commensurate with the RN standards for practice. Learning and consolidating professional capability requires time and consistent supported practice in the clinical environment. The current amount of placement time allocated for UGN programs is neither evidence based nor demonstrating success in accomplishing its purpose. This needs review and acknowledgment that the current duration of nurse education may need to extend to accommodate the relevant type and amount of practice required. Optimising the link between what is taught in the classroom and practised in the clinical setting and developing authentic assessments that promote interaction and reflect the responsibilities of a RN will facilitate meaningful, integrated learning experiences that enhance practice readiness. Findings from this study suggested that the final 6-week clinical practicum in the UGN program and paid employment experiences offered the time, continuity and relevant clinical practice to enhance practice readiness. Reviewing how

paid employment can best augment clinical placement experiences for the development of practice readiness would be beneficial. This could involve the development of UGN employment programs in partnership with the practice sector with clear aims and objectives to enhance the preparation and practice readiness of NGRNs. With this, exploring the potential to align the final 6-week clinical practicum with a NGRN's future place of employment could further strengthen this approach. Specific focus on investigating these as an approach for specialty areas of practice would be particularly useful.

Recommendation 2:	Review the quality and quantity of clinical placement experiences for UGNs with the aim of enhancing practice readiness
Recommendation 3:	Explore the use of a model of clinical experience that incorporates paid employment and clinical placement experience as part of UGN programs

Establishing the foundational capabilities and frameworks to support NGRNs to work effectively within healthcare environments and transition successfully from student to professional RN is vital to retaining these nurses as part of the healthcare workforce. Accomplishing this is reliant on those involved in pre- and post-registration education recognising that the education of RNs is a shared responsibility and that an integrated reciprocal approach is necessary for success. Developing mutual reciprocal relationships with the practice sector that enable an exchange of knowledge, expertise and presence of clinicians and academics would optimise the acquisition of relevant capability for RNs to reduce the education–practice gap and create a shared understanding of the goals of clinical placement and joint responsibilities in achieving these goals.

Recommendation 4:	Develop reciprocal, mutual partnerships between education and practice sectors to augment the education of RNs

11.4.2 Practice

When NGRNs commence practice, they simultaneously learn and work. NGRNs enter practice with varying levels of practice readiness and need to be assessed accurately to determine the appropriate levels of support and expectations. It is suggested that practice and education sectors work in partnership to develop objective, reliable methods for assessing and determining practice readiness during interviews, orientation and clinical rotation that lead to

consensus. Established tools such as that produced by Walker et al. (2015) could be useful for this purpose.

Recommendation 5:	Develop reliable methods to assess NGRNs' level of practice readiness and competence in the workplace.

A further consideration for the practice sector is the framework provided to support the personal and professional change, learning and development that NGRNs experience. Current NGRN transition programs exist, however they are inconsistent in design and implementation. It is suggested that a national 12-month evidence-based program of support be developed and mandated to improve these inconsistencies. Such programs would require organisational commitment to ensure they are sustained with adequate resources. This includes the provision of adequate staffing to ensure preceptors and NEs can accommodate their responsibilities and are prepared to support the individual needs of NGRNs. Processes to identify preceptors and create environments and educational opportunities that inspire RNs to want to precept would help ensure positive relationships that enable NGRNs to flourish. Establishing NE positions at unit level would ensure dedicated support is available to support NGRNs and staff.

Recommendation 6:	Develop a national evidence-based 12-month program of support for NGRNs that supports their personal and professional development and transition
Recommendation 7:	Prepare and support RNs as preceptors in the healthcare setting to effectively fulfil their role
Recommendation 8:	Make provisions for dedicated nurse education positions at unit and ward level

As the findings in this study revealed, conditions in the workplace shape NGRNs' preparation, practice readiness and evaluations of practice readiness. Creating healthy workplaces requires effective leadership that fosters collegial healthcare teams that are respectful and embrace learning. Organisations must consider how they can provide professional, organisation and educational support for nursing leaders to develop their capability and capacity to foster healthy, positive workplace cultures. Healthcare environments are both learning and working environments and a significant contributor to the education of RNs. All nurses must continuously learn and grow to succeed. Positive healthy

workplaces provide an environment where this is achieved, learning is valued and job satisfaction and retention are higher. In these environments, NGRNs thrive and evolve.

Recommendation 9:	Invest in developing positive HWEs that promote and support collaborative learning and working.

11.4.3 Policy

Preparing practice-ready NGRNs and supporting their transition and development to become competent RNs is essential to safe standards of care. Ashton (2012) remarks that 'demonstrating an interest in new graduate nurses' experiences is an authentic and credible expression of concern for the succession of the nursing profession and its continued relevance to society' (p. 16). This study has highlighted the need to review funding and reinforce policies relating to the education of RNs. Financial and political agendas should not be the driving force in how healthcare professionals are educated and work. Consideration must be given to the increasing complexity in healthcare environments and the impact on healthcare teams, particularly when resources do not meet demand. This has the power to affect RNs' attitude and ability to fulfil their responsibilities, including the education responsibilities embedded in the *Registered nurse standards for practice* (NMBA, 2016). Strengthening policy at national and organisational levels to ensure adequate funding and staffing models commensurate to patient load and acuity is necessary to ensure staff and patient safety and nurse retention.

The competing priorities of the practice, education and policy sectors must be openly discussed and resolved. Professional, educational and healthcare leaders must collaboratively examine the capabilities NGRNs need to succeed in contemporary environments and advocate for appropriate resources in the clinical setting to achieve these. Drawing together to inform policy and regulators ensures collective responsibility for the outcomes and alignment of education with service needs and expectations. As a priority, a national policy framework needs to be developed that:

1. recognises the value of NGRN transition programs
2. guides HCPs on the design and implementation of NGRN transition programs
3. sanctions the relevant financial, human and tangible resources to support organisations in their commitment to implementing these programs.

Policies need to be strengthened to ensure appropriate staffing and a skill mix and adequate resources to support nurse leaders to maintain adequate workloads and patient safety. This would enable staff to better support NGRNs and offset the need for NGRNs to take on responsibilities beyond their capability.

Recommendation 10:	Develop federal, state and territory funding and policy commensurate with the needs of educational and practice sectors for the education of RNs

Consideration must also be given to developing standards of practice that are commensurate with the level of competence NGRNs can reasonably achieve in the current model of nurse education. Findings from this study suggest these would reflect the practice of novice RN. HCPs identified common capabilities for practice readiness that reflect previous research and could be used as a guide to develop a set of standards for entry-level practice as an RN.

Recommendation 11:	Develop NGRN standards for practice that describe a novice level of practice for NGRNs and are achievable in the current model of nurse education

Findings in this study demonstrate that a NGRN's first year of practice is an extension of learning and development to become a competent RN. NGRNs require practice as a professional RN to become practice ready and competent to the standard outlined in the RN standards for practice. In the current model of nurse education, meeting this need and standard is unachievable. Nurse education programs are already struggling to incorporate content and clinical experience commensurate with practice in contemporary healthcare environments. It is therefore suggested that current BN programs be extended and become a 4-year degree program that includes a regulated period of clinical experience as an RN in the form of a professional internship.

Recommendation 12:	Redevelop and extend the current model of nurse education to become a 4-year degree program that includes a professional internship for NGRNs

11.4.5 Research

NGRNs will continue to commence practice in complex evolving and unpredictable healthcare environments. As the population ages, grows in size and changes in demographics, the demand for RNs prepared with broad capabilities will increase. Further research is required into the capabilities for practice readiness in Australia to verify findings of this study and identify enduring capabilities to support RNs for future healthcare.

Recommendation 13:	Undertake a broader investigation of the domains of practice readiness across Australia and healthcare services

An exploration is required of the adequacy of the time allocated for clinical placement in UGN programs in Australia to determine what is required to ensure UGNs have sufficient time to learn, practice and consolidate their capabilities for practice readiness. As noted earlier, the current placement time allocated for UGN programs is neither evidence based nor demonstrating success in accomplishing its purpose. This requires review and acknowledgment that the current model of nurse education may need to extend to accommodate the relevant type and amount of practice required.

Recommendation 14:	Conduct research to establish the appropriate amount and type of clinical experience required to develop competent RNs

NGRNs' first year transition experiences are reliant on understanding and developing practice readiness and cultivating conditions for NGRNs to continually learn, grow and succeed. If these factors are inconsistent, intimidating and too challenging, NGRN transition will be unpredictable and perplexing, regardless of a NGRN's pre-registration education and preparation. Further research is therefore needed on the factors that lead to incivility and negative treatment of NGRNs in the workplace to determine how these can best be addressed, along with identifying strategies for creating HWEs for healthcare settings in Australia.

Recommendation 15:	Explore factors that contribute to positive workplace environments in Australia

Investigating the viability of extending the current UGN program and incorporating a professional internship for RNs in Australia would enable the time and flexibility to provide relevant content and clinical experience to prepare competent RNs. This is both timely and

needed to address rapid changes within healthcare and nursing. Evaluation of the short and long-term outcome of NGRN transition programs in Australia in regard to a NGRN's transition, capability and attrition and the cost to healthcare organisations would be needed to support this work. In addition to these evaluations, exploring the impact and needs of NGRNs commencing the first year in a specialty area to identify methods for introducing NGRNs to specialty practice without comprising the development of their foundational capabilities would be useful.

Recommendation 16:	Investigate the development of a 4-year UGN program that incorporates a professional internship

11.5 Limitations

In this study, there are limitations that must be considered when interpreting the findings. According to Denscombe (2014), limitations are present in all research and those identified as potential issues in this study are now considered. Reporting limitations is the final step in ensuring trustworthiness of research. Being transparent about limitations enables the reader to make informed judgments about the rigour of the research design and findings.

The first potential limitation that warrants discussion is researcher bias. This is a qualitative research study designed to explore and understand the perceptions of others. As with all qualitative research, the researcher is positioned as the instrument of the study and a partner in the process (Birks, 2014). As such, a level of subjectivity, while acknowledged as part of the process, could influence the interpretation of data and findings. Areas of influence could stem from the researcher's background, experience, expertise or philosophical position. These are outlined in the thesis and, coupled with a detailed account of the research methods, are aimed at ensuring the reader is able to discern areas of potential influence in the research process and make informed judgments about the findings. Reflexive activities have also been used to mitigate and counteract this influence. These have included consistent memoing, supervisory checking and self-auditing, and testing of different aspects of the research process, such as the interview questions and technique. A thorough evaluation of the process and product of the research for rigour and quality added further support to minimising researcher influence.

The participant sample and data collection methods could also be a potential limitation in this study. The inclusion of only one focus group reflects the difficulty of being able to bring

together diverse healthcare professionals from demanding clinical settings at one time. The final sample size and interviews mitigated this limitation and alleviated concerns of being unable to generate rich data to address the research aim. Semi-structured interviews allowed a level of flexibility to explore topics that provided depth and breadth to the conversations. The interview environment provided a space where healthcare professionals' privacy and confidentially was preserved. This generated frank and open conversations about the research topic, providing insight into areas that in a focus group may not have been easily disclosed, shared and discussed. Limitations could exist with participant recruitment and sampling. The use of purposive and snowball sampling methods is common in case study research; however consideration must be given to the fact that participants who choose to be included are those with a desire to voice their opinions. While potential limitations could relate to the profile of participants and specifically the low number of medicine, HR and AH professionals at some sites, data from each case and group revealed similar findings. This, coupled with the large sample size and breadth of representation from four different healthcare professionals across cases, counterbalanced these concerns.

Finally, generalisability of findings may be considered a limitation in this work. Findings from this study are based on results from one state in Australia and may not be generalisable nationally or internationally. Like all states, QH have features unique and designed specifically for healthcare and service delivery in Queensland. Further, the majority of nursing participants in this study obtained their qualifications and work in Queensland. These factors must be considered given the influence of context on participant perceptions. This is, however, a multiple case study with representation from four different healthcare contexts across different geographic locations. The HCP sites varied in size and service capacity, giving a broader scope for the application of the findings to other contexts.. Further, case study research aims to create analytic generalisation through reader resonance with the findings and their ability to relate and apply the findings to their own context (Yin, 2014). Efforts were made to provide in-depth descriptions and illustrative quotes that enable the reader to make informed judgments about the applicability of the findings to their context of practice. In addition, the sample size and consistency of views across HCP groups and contexts strengthens the likelihood of resonance beyond these settings. Finally, findings related to the influence of context and the capabilities for practice readiness are supported by findings of others who explored the concept (Caballero et al., 2011; El Haddad et al., 2017; Walker et al., 2015; Wolff, Regan et al., 2010).

11.6 Chapter Summary

This chapter concludes this thesis. This study used collective case study to define NGRN practice readiness from the perspective of Australian HCPs and explain the process by which a NGRN is determined to be practice ready. This study demonstrates the capabilities and importance of ensuring NGRNs are ready for practice. Healthcare environments are changing as shaped by consumers and geographic, economic and workforce changes and challenges. In response, the nursing profession and responsibilities of RNs are evolving. The combination of these factors heightens the need for NGRNs to be practice ready to provide safe standards of healthcare in complex contexts.

NGRNs are the future of the nursing profession and foundation of the healthcare workforce. The role of RNs will continue to change and evolve, as will healthcare. Preparing and transitioning NGRNs adequately into their RN role is a shared responsibility between those involved in nurse education, including in the areas of practice, policy and research. It is imperative that collectively these groups ensure future generations of RNs are prepared for the responsibilities expected of them and able to meet a standard of practice that protects and empowers consumers and keeps them safe and satisfied with healthcare. NGRNs need to be enabled to adapt and evolve to carry the profession and healthcare forward. Advocating for HCPs support, HWEs and understanding and accommodating processes to assure NGRNs' practice readiness contributes to ensuring these goals are successful.

Epilogue: Reflecting Forward

Live as if you were to die tomorrow. Learn as if you were to live forever.

Mahatma Gandhi

Many years ago, someone with whom I worked and who I admired for their positive resilience, professionalism and integrity, was leaving their role in HR for what she called ‘her new adventure’. Pauline and her husband were leaving for Tasmania to start a lavender farm. While sad about her leaving, I was simultaneously excited and curious—why, such a great change?; more so, a diverse change they knew about, but in reality, knew very little about. Pauline explained to me that it was time to move on, time to experience something new, advising me to ‘always keep new adventures in your life’. Her words have remained with me as I have journeyed through my life. I have tried to keep new adventures in my life, to keep me learning, motivated and growing. My PhD was an inevitable ‘new adventure in my life’. I say inevitable as I feel it was meant to be; I just needed the time, the place, the people and ‘the problem’ to get there. I say an adventure as that is what it feels like and an adventure full of moments of trepidation, anxiety, discovery, joy and great satisfaction. Some say it is a roller coaster—I say it is Disneyland—a mixture of everything for all the senses and on completion, a joyous fulfilment in the context of a pleasant state of fatigue. Memories to carry forward and share and fortunately a book capture the full depth and breadth of the experience.

In retrospect, I began my PhD as a naïve enquirer: excited, feeling somewhat capable and confident but with some trepidation and anxiety. I had a lifetime of study, education and practice, excellent support in place and knew who and where to seek guidance. I thought I was ready. While I knew in theory, in principle and with some experience what a PhD was about, I was not prepared for the reality of what that meant in practice—a circumstance that is not unlike that of the NGRN journey into the nursing profession.

I have learned much from this experience. First, I have extended my research capability and passion, grown as a person and been challenged in the way I view, interpret, understand, accept and represent the realities of others. The experiences of others hold worthwhile and valuable sources of knowledge for learning and development. Second, I am not sure one is ever ready for new adventures. I realise now that I was never ready for any of my adventurers and certainly not this one. Like the participants expressed in this study, I think readiness is ‘something you become’ along the way, a preparation for the next adventure and this is all

part of the learning. New adventures bring the unexpected and this is often where our greatest learning emerges—being open and accepting of the unknown enhances our growth. Finally, I feel that the experience of completing this PhD has provided a pathway and opportunity for new adventures, and a way to contribute and give back: things I love to do. We are all teachers as we are learners and as I move on to my next adventure, ‘pay it forward’ will be a key motivation in what I choose to do next.

Reflecting on my master degree graduation in 2002, I recollect the sense of pride and accomplishment, and a conversation I had with my aunt. I ‘jokingly’ informed her that I would one day be the ‘first female Dr Harrison in the family’; my family was oversupplied with doctors—all male. At the time, I had no intention or desire for this and actually believed my gifted cousin or niece and godchild would be the first in such an achievement. Now I am blessed with having undertaken the journey and bestowed with the expertise and wisdom of those who have guided me, and the experience and knowledge that I can use to guide them and others when the time comes—a twofold achievement that neatly satisfies my desires, passions and commitments.

As Simon Sinek would say, there are two types of games people play, each enjoyable for their purpose: ‘finite games’ with rules to follow and an end point to achieve and ‘infinite games’ that move forward to the future, have no ending, evolve and grow, and innovate with perpetual change.

A PhD is the beginning of an infinite game.

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Appendices

Appendix 1: Conceptualising practice readiness—Summary of literature

Title	Year Location	Author	Aim	Research methodology	Participants	CASP Summary	Conceptual Definition
1. Work readiness in graduate recruitment and selection: a review of current assessment methods.	2010 **Australia**	Caballero, C., Walker, A.,	Review of current graduate recruitment, selection and assessment practices focusing on graduate work readiness.	**Literature review** Topics presented Graduate recruitment, selection, assessment practices in British, European, and Australian contexts. Summary of literature provided.	8 papers	· GN or graduate defined: No limitations noted. No clear search strategy. · Clear structure - Logical flow of key topics. · Author overlap: Study 2, 4, 5 & 6 · Primary and secondary author same: Study 2	Work readiness (WR): The extent to which graduates possess the attributes that prepare them for success in the workplace (Caballero and Walker, 2010)
2. The work readiness scale (WRS): developing a measure to assess work readiness in **college graduates.**	2011 **Australia**	Caballero, C., Walker, A., Fuller-Tyszkiewicz, M.	Explore work readiness to develop a Work Readiness Scale (WRS). (a) Identify attributes and characteristics of work readiness; (b) Use the qualitative data to develop items for a WRS (c) Pilot tests the scale.	**Qualitative exploratory** **Phase 1:** Semi-structured interview and focus groups; thematic analysis **Phase 2:** Work Readiness Scale (WRS) developed (167 items) and sampled.	**Phase 1**:30 participants (16 M; 14 F); 9 HR; 21 Graduates **Phase 2** 251 participants (189 M; 62 F) Range of disciplines not health related	· GN or graduate not clearly defined · Graduate professions not clearly identified. · Clarity on study design absent, however procedures / methods clear. Inclusion/exclusion criteria for HR professionals; Graduate recruitment phase 1 through "business contacts" implies business graduates; Phase 2 convenience sample - no health graduates · Recruitment, data collection and analysis stated. Sample predominately male · All statistical data analysis described and relevant. Coding examples presented. Ethical considerations explained. · Step by step of process to develop WRS. Discussed in context of literature; limitations noted · Author overlap: Study 1, 4, 5 & 6 · Primary and secondary author same: Study 1	Work readiness (WR): the extent to which graduates possess the attributes that prepare them for success in the workplace (Caballero and Walker, 2010); Four factor construct supported Social intelligence; personal characteristics; organisational acumen; work competence
3. Graduate registered nurse practice readiness in the Australian context: An issue worthy of discussion	2013 **Australia**	El Haddad, M., Moxham, L., & Broadbent, M.	Examine graduate registered nurses' practice readiness.	**Scholarly paper**	Not applicable Relevant literature sourced Key topics presented logically	· No definition of graduate nurse. · Context of workforce & meeting health care need. · Key areas of health care demand, nurse education international issues and concept of practice readiness are addressed. · Argument relevant and evident appropriate.	NIL

Conceptualising practice readiness—Summary of literature *continued*

Title	Year Location	Author	Aim	Research methodology	Participants	CASP Summary	Conceptual definition
4. Work readiness of graduate nurses and the impact on job satisfaction, work engagement and intention to remain	2013 **Australia**	Walker, A. & Campbell, K.	Explore relationships between work readiness and a number of work outcomes (job satisfaction, work engagement, and intention to remain)	**Quantitative Survey design.** Three specific hypothesis	96 GN (88 Female and 6 male) from two regional hospitals in Victoria, Australia	· Described graduate- no definition of GN · Aim and context represented. · Design clearly presented. Limitations and ethical procedures noted. Data collection and analysis clearly detailed-audit trail evident. Quantitative analysis detailed and appropriate. · Tables used to display data. · Discussed in context of relevant contemporary literature, logically aligned with aim and findings. · Future research noted. · **Author overlap:** Study 1, 2, 5 & 6 · Primary author same: Study 5 & 6	The extent to which graduates are perceived to possess the skills and attributes that render them prepared for success in the workplace. Multidimensional construct comprising skills and attributes beyond discipline-specific competence
5. Refinement and validation of the Work Readiness Scale for graduate nurses	2015 **Australia**	Walker, A., Storey, K.M. Costa, B., & Leung, R.K.,	Refine and validate the WRS-GN and determine whether the original four-factor construct was supported.	**Qualitative exploratory** Adapted the original WRS for use with a graduate nurse population (WRS-GN). 60-item self-report WRS-GN (51 original; 9 new) Exploratory factor analyses	450 NGRN (426 F; 22 M) Recruited over a 3-year period (2012-2014) from four health organizations located in regional and metropolitan Victoria	· GN or graduate vaguely defined. Recruited through Graduate program (convenience sample but large and substantial time period. · Rephrasing of items – process unclear; · Aim and context presented, key concepts defined. Data analysis clear, comprehensive and appropriate · Limitations and ethical procedures noted. · Discussed in context of relevant literature: more recent sources could have been used. · **Author overlap:** study 1, 2, 4 & 6 · Primary author same: Study 4 & 6	Work readiness (WR); the extent to which graduates possess the attributes that prepare them for success in the workplace (Caballero and Walker, 2010); Four factor construct supported Social intelligence; personal characteristics; organisational acumen; work competence
6. Work readiness of graduate health professionals.	2013 **Australia**	Walker, A., Yong, M., Pang, L., Fullarton, C., Costa, B., & Dunning, A. M. T.	Investigate work readiness among graduate health professionals (HPs) Aimed to explore competencies and skills that comprise WR among graduate HPs	**Qualitative exploratory** Interviews and critical incident technique 92 critical incidents; 52 related to helping 40 to hindering work readiness factors that impacted graduates' transition and integration experiences. Thematic analysis	41 Graduate HPs 15 medical; 26 nursing 5 organisational representatives Regional public hospital in Victoria, Australia	· GN or graduate not defined. · Recruited through Graduate program (convenience sample). Medical, RN and HR only. · Aim and context presented, however two similar aims noted. Key concepts defined. · Data collection and analysis clearly detailed-audit trail evident. · Results presented as themes with illustrative quotes. Discussed in context of relevant contemporary literature. · Limitations and ethical procedures noted. · **Author overlap:** Study 1, 2, 4 & 5 · Primary author same: Study 5, 4	Work readiness (WR); the extent to which graduates possess the attributes that prepare them for success in the workplace (Caballero and Walker, 2010); Four factor construct supported Social intelligence; personal characteristics; organisational acumen; work competence

Conceptualising practice readiness—Summary of literature *continued*

Title	Year Location	Author	Aim	Research methodology	Participants	CASP Summary	Conceptual definition
7. New graduate nurse practice readiness: Perspectives on the context shaping our understanding and expectations	2010a **Canada**	Wolff. A.C, Pesut. N., & Regan, S	Explore perspectives of nurses about new graduate nurse practice readiness and the underlying context shaping these perspectives.	**Qualitative exploratory** Part of a larger applied policy project focusing on the readiness of nurses **Focus** groups (60-90 mins) semi-structured interview content analysis and coding	Nurses with varying years of experience 150 nurses: 15 focus groups (FG) 11 FG (115 nurses) practice sector, 3 FG (31 nurses) education sector 1 FG (4 nurses) regulatory sector.	· Definition of graduate nurse provided. · Aim and purpose evident. Background context relevant. Mixed purposive sampling methods. Recruitment and data collection detailed and clear with inclusion, criteria and timeframe stipulated. Ethical considerations evident and stated. Data analysis transparent- audit trail noted. · Results- no participant quotes. · Limitations stated and reflect content of study. Discussion with relevant evidence. · **Author overlap:** Study 8; · Primary author same: Study 8	Moving seamlessly into practice · Practice readiness is commonly used; *nurses understand the term differently* · *Influenced by* historical and social context within which nursing education and professional practice is grounded.
8. Ready for what? An exploration of the meaning of new graduate nurses' readiness for practice.	2010b **Canada**	Wolff, A. C., Regan, S., Pesut, B., & Black, J.	Explore the perspectives of nurses in the education, practice, and regulatory sectors about the meaning of readiness as it pertains to new graduate nurses. Secondary aim was to identify examples of readiness to better understand the points of tension among the sectors.	**Qualitative exploratory** Part of a larger applied policy project focusing on the readiness of nurses **Focus** groups (60-90 mins) semi-structured interview content analysis and coding	Nurses with varying years of experience 150 nurses: 15 focus groups (FG) 11 FG (115 nurses) practice sector, 3 FG (31 nurses) education sector and 1 FG (4 nurses) regulatory sector.	· GN or graduate defined: NG with two years or less of experience in providing direct client care and "recently graduated". · Aim and purpose evident and discussed extensively in relevant background context · Participant sample detailed with inclusion criteria and recruitment method explained. Ethical considerations stated. Data collection and analysis clear- audit trail evident. · Results supported with illustrative quotes and explanations. Discussion logical flow and relevant timely literature. · **Author overlap:** study 7 · Primary author same: Study 7	· Meaning of new graduate nurses' readiness for practice as having a generalist foundation and some job specific capabilities that go beyond clinical competence · The term readiness in nursing literature is not clearly defined and developed as a concept. · Meaning of NGRN readiness for practice a. Generalist foundation and some job specific capabilities, b. Providing safe client care, c. Keeping up with the current realities of nursing practice, d. Possessing a balance of doing, knowing, and thinking. · Readiness is not static but fluid and evolving with trends · Begins at entry-level education programs and continues in the post-hire transition period of employment.

Appendix 2: National classification systems

Classification	Definition and Description
ASGS-RA	**Australian Statistical Geography Standard - Remoteness Areas** The ASGS is now the sole ABS statistical geography. Australian Bureau of Statistics' new geographical framework and it is effective from July 2011: The ASGS replaces the Australian Standard Geographical Classification (ASGC).
MMM	**Modified Monash Model** The MMM is a new classification system that better categorizes metropolitan, regional, rural and remote areas according to both geographical remoteness and population size. The system was developed to recognize the challenges in attracting health workers to more remote and smaller communities. General practice and specialist allowances http://www.ruralhealthaustralia.gov.au/internet/rha/publishing.nsf/Content/changestoGPRIPfactsheet
RRMA	**Rural Remote and Metropolitan Areas** First of three classifications; seven classes and categorized three zones metropolitan; rural; remote. Distance to service centres and distance to populations.
DWS	**District of workforce shortage** An area identified as having below average access to doctors. This is determined using population data and Medicare billing information to get a GP to population ratio.
SA	**Statistical Area Level** The Main (SA) Structure is based on the functional area of major cities and towns and gazette suburbs and localities

Source:

Mason, J. (2013). *Review of Australian Government Health Workforce Programs*. Australian Government department of Health and Ageing. Retrieved from http://www.health.gov.au/internet/main/publishing.nsf/Content/review-australian-government-health-workforce-programs.

Australian Bureau of Statistics. (2014). *Remoteness structure*. Retrieved from http://www.abs.gov.au/websitedbs/d3310114.nsf/home/remoteness+structure.

Appendix 3: Human Research Ethics Committee Approvals

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Appendix 4: Explanatory statement and consent

JAMES COOK UNIVERSITY AUSTRALIA

Explanatory Statement

TITLE: New graduate registered nurse practice readiness for Australian health care contexts: A collective instrumental case study.

You are invited to participate this research study that aims to provide insight and feedback about New Graduate Registered Nurse (NGRN) practice readiness within Australian health care contexts. Please read this explanatory statement and the consent form carefully before agreeing to participate. If you would like any further information regarding any aspect of this study, please do not hesitate to contact the researchers via the contact details listed at the end of this explanatory statement

Who is conducting the study and what is this research about?

The study is being conducted by Helena Harrison and will contribute to a research study in a PhD at James Cook University (JCU). This research is about new graduate registered nurses (NGRNs) and their readiness for practice in health care contexts in Australia. The study will include exploring the views and experiences of health care providers (HCP) about NGRN practice readiness in their health care setting. Four health care facilities in four different geographic locations in Queensland have been selected for data collection.

What is the aim of this study?

This case study will explore health care provider perceptions of NGRN practice readiness within Australian health care contexts. The aim is to define NGRN practice readiness from the perspective of Australian health care providers and explain the process by which a NGRN is determined to be practice ready. Characteristics that demonstrate NGRN practice readiness will be described and the expectations and needs of health care providers of NGRN in Australia identified. More specifically, an improved understanding of practice readiness will provide for a better alignment of educational preparation with the realities of the workplace, and refinement of transition programs to match NGRN outcomes with the needs of the health care system

What does the research involve?

The research will involve the principle researcher being on one of four sites for a period of three to four days to collect data. Data collection will include interviews and focus groups conducted by the principal researcher with participants sought from a range of individual health care providers: nursing, allied health, medical and human resources. Document review and the researchers field notes about the site will also formulate part of the data collection and analysis.

If you agree to be involved in the study, you will be asked to participate in an interview and/or focus group. The individual interview should only take approximately one hour and can be conducted face-to-face at a time and venue of your choice or via another medium (telephone or Skype) as appropriate for you. Similarly the focus group will take approximately one hour and be conducted at a venue close to your place of work. With your consent, the individual interviews and focus group will be audiotaped for transcription and demographic data related to your age, gender, profession, education, years of experience, role and responsibilities will be collected.

You may also be asked to provide feedback at a later date on the progressive analysis. This will be a verbal communication in focus groups or electronic communication that will seek views about findings from the analysis related to key concepts. This feedback should take no more than 10 minutes, is anonymous and confidential.

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Consent and Confidentiality

Taking part in this study is completely voluntary and non-participation in this study will not affect your current or future employment within your current or future choice of health care institution.

You can stop taking part in the study at any time without explanation or prejudice. Therefore at any point you would like to withdraw or feel uncomfortable as a result of the interview and/or focus group process, you can ask the researcher to discontinue the process. The researcher is able to arrange counselling services if required.

Responses and contact details will be strictly confidential. All data will be kept confidential and de-identified. In focus groups where there is more than one participant, confidentially will be requested although cannot be guaranteed: however data will be de-identified. The data from the study will be used in research publications and reports as they relate to this PhD study. You will not be identified in any way in these publications.

Security and Storage of data

During the research all data will be kept secure in password protected documents and database, locked cabinet and when on site, in a locked briefcase. Upon the completion of research all information collected will be stored securely and password protected by JCU for a period of five years. Only the principle researcher and the supervisors will be able to access the data, which can only be disclosed with participant's permission.

Potential advantages to your participation

It is hoped that this study will contribute positively towards our understanding of the practice readiness of NGRN. Health care providers such as yourself employ and work closely with NGRNs and experience NGRN practice readiness first hand. Consequently you are uniquely positioned and essential to inform this understanding and help shape the future preparation and transition outcomes for NGRN.

Approval of the research project

JCU, Queensland health and site specific research ethics committees have approved this study. The research will be conducted according to the National Statement on Ethical Conduct in Human Research (National Health and Medical Research Council of Australia, 2007) developed to protect the interests of those participating in human research studies.

If you have any questions about the study, please contact:

Principal Investigator:
Name: Helena Harrison
College of Healthcare Sciences
James Cook University
Phone: 4232 1548
Email: helena.harrison@jcu.edu.au

Primary Supervisor:
Name: Jane Mills
College of Healthcare Sciences
James Cook University
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If you have any concerns regarding the ethical conduct of the study, please contact:
The Townsville Hospital and Health Service Human Research Ethics Committee:
PO Box 670 Townsville, Qld, 4810
Phone: (07) 4433 1440
TSV-Ethics-Committee@health.qld.gov.au

Thankyou

Helena Harrison

This administrative form
has been removed

Appendix 5: Semi-structured Interview and focus group protocols

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Interview Protocol

Semi structured individual in-depth interviews about the experiences of NGRN practice readiness will be conducted

- The participants will be questioned about how they generally experienced NGRN practice readiness and what aspects of their performance were significant (positively or negatively) in their performance that indicated practice readiness.
- They will also asked how they determined if a NGRN was practice ready and factors important to this decision.
- The interviewer will ask for details and concrete examples but also invite participant reflections on the themes that came up in the literature and focus groups and the influence of their specific context of practice.
- Each interview will be scheduled for approximately 1 hour.
- Permission to collect and store the data was requested and approved throughout the process
- Each will commence with:

  - **Introduction**
  - **General overview of the research and what I am hoping to gain**
  - **Brief some background points included in the opening and at times through the interview**
  - **Questions focussed on:**

1. Can you briefly tell me what practice readiness means to you?
2. What knowledge, behaviours, attributes, skills do you think demonstrate practice readiness? **Think about the NGRN you have worked with:** Can you describe an event that demonstrates a "practice ready nurse"
3. What do you believe makes a NGRN ready for work in your area?
4. How do you know if they are practice ready- what do they say or do that shows you this?
5. How do you evaluate, measure or determine this- are there experts, standards or policies and specific practices that guide you in this?
6. What characteristics do you think are most important for a work ready graduate?'
7. Does everyone in your team/institution have the same ideas?
8. If it could be different how would they be different? Why?
9. Do you work differently with someone you think is ready or not ready?
10. Think about your work environment –are there barriers and enablers to the NGRN performing competently?

Focus groups: small group discussion about the experiences of NGRN practice readiness will be conducted with a similar approach to the semi structured interview

- The participants will be questioned about how they generally experienced NGRN practice readiness and what aspects of their performance were significant (positively or negatively) in their performance that indicated practice readiness.
- They will also asked how they determined if a NGRN was practice ready and factors important to this decision.
- Effective in eliciting data on the cultural norms of a group and in generating broad overviews of issues of concern to the cultural groups or subgroups represented.
- Ask to describe the ideal NGRN – from a collective
- Each will commence with

  - **Introduction**
  - **General overview of the research and what I am hoping to gain**
  - **Brief some background points included in the opening and at times through focus group to set the scene**
  - **Focus group questions drawn from semi structured interview questions and modified accordingly:**

1. Can you briefly tell me what practice readiness means to you?
2. What knowledge, behaviours, attributes, skills do you think demonstrate practice readiness? **Think about the NGRN you have worked with:** Can you describe an event that demonstrates a "practice ready nurse"
3. What do you believe makes a NGRN ready for work in your area?
4. How do you know if they are practice ready- what do they say or do that shows you this?
5. How do you evaluate, measure or determine this- are there experts, standards or policies and specific practices that guide you in this?
6. What characteristics do you think are most important for a work ready graduate?'
7. Does everyone in your team/institution have the same ideas?
8. If it could be different how would they be different? Why?
9. Do you work differently with someone you think is ready or not ready?
10. Think about your work environment –are there barriers and enablers to the NGRN performing competently?

Potential – focus groups approach to clarify, explore further or bring together ideas

1. What are they ready for?
   What are they not?
2. What is the current picture?
   What is the ideal?
3. Factors that help you decide they are ready?
   Factors that tell you they are not?
4. What is great about them?
   What could be better?
5. Who is responsible?
   What strategies could you suggest?

Appendix 6: New graduate registered nurse transition programs and support

Program Elements	Case 1[R]	Case 2 [SOR]	Case 3 [IR]	Case 4 [LOR]
NGRN Coordinator	[1]NE: monitor progress, manage issues	[2]DON/FM; [1]NE x 2: monitor progress; manage issues	[3]NM; [1]NE and [4]CNC: monitor progress and manage issues	[1]NE: monitors progress, manage issues
Time of Intake	February-March and July Unplanned: Intermittent across year	January, February Unplanned: Intermittent across year	February Staggered onboarding as required	February; March; April Unplanned: Intermittent across year
NGRN Numbers	< 2015: 4-6 NGRNs > 2015: 13-20	4-6 NGRNs Dependent on positions available	37- 40 NGRNs	140 NGRNs
1. Orientation	1 week: HHS and organizational Unit based: varied	1 week: HHS, organizational, site 1 week: Ward based orientation	2 days: HHS and organizational, 2 days: NGRN Specific	1.5 days HHS and organizational; 3.5 days NGRN Specific
2. Supernumerary	Ideally: 2 weeks - service dependent	2 days – 1 week Commence in EN position and perform as RN with support	Ward dependent	**Guidelines:** 1 week: first rotation; 2 days: 2nd, 3rd rotation **Current:** Varies: 1 hour to 1-3 weeks
3. Study days per year	3 Days End of each rotation - includes debriefing session	3 Days across the year	3 Days not mandatory SD 1- [5]NUM organizes: SD 2 and 3- NGRN must organize	2 Days NGRN specific 4 education forums [NGRN present] Weekly Sessions • 4 Reflective tutorials • 4 Grand rounds
4. Performance appraisal and development (PAD)	Each rotation and 6 monthly	Facility based appraisal Informal appraisal with NUM	End each rotation NGRN Specific designed	PAD: 4 weeks of commencement [6]PR: each rotation
5. Rotations	3 x 4 month rotations: • Medical, Surgical and Specialty: Emergency Department, Intensive care, Operating theatre, pediatrics, community, primary health care • Direct entry: 2 Midwifery; 1 Neonate Intensive Care	2 x 6 month rotations: • Medical, Surgical alternate • Subspecialty rotations within these: community and primary health care, perioperative; palliative care • Second year - specialty	2 x 6 month rotations: • Recent change from: 3- 4 - 6 • Medical, Surgical and Specialty: Intensive care, Emergency, operating theatre, pediatrics, community and primary healthcare	2016: 3 x 4 month rotations 2017: 2 x 6 month rotations • All general and specialty areas

New graduate registered nurse transition programs and support *continued*

Program Elements	Case 1[R]	Case 2 [SOR]	Case 3 [IR]	Case 4 [LOR]
Support: Personnel	NGRN coordinator; Unit based [7]CN and /or [8]CF	HHS CN position: supports NGRN 3 days/fortnight - 10 weeks Ward based NUM, CN, Preceptor	NUM Unit based CNs and /or [9]CC.	[10]CNE specific to Graduate program; Unit based CNE, CN and preceptors. Moving to a CC model
Support: Education	Education Programs: skill development; scope of practice; rural and remote practice	• Week 1 on floor with NE • Skills mix change to support NGRN • Orientation packages • Orientation and support repeated each rotation	Program documents and an individualized NGRN professional portfolio folder (hard cover and labeled with NGRN name)	Education Programs Regular debriefing sessions
Program Evaluation	Informal moving to formal General feedback from NGRN and Clinical Units	Informal: General feedback informs program development	Yearly at the end of the program with NGRN and ward staff	Benchmarking at the end/beginning of each NGRN program
General Comments	• Emergency rotation highly rated due to structured model of learning, new environment and overall experience • Remote community and primary health care sites successful with educational and social support • Night shift: occurs and is unit dependent	• Aligned to HHS polices related to employment of NGRNs • Early introduction to management: Interview and orientation meet DON/FM • NGRN encouraged to take annual leave between rotations to help adjust to lifestyle change • NGRN engage in shift work on commencement including night duty with dedicated preceptor support.	• Highly organized program with documented education resources. • NGRN will undertake all shifts: Night duty determined by unit NUM • Educational support in clinical practice can be inconsistent (no designated person or support absent)	• 2011: 42% completion rate • 2016: 98% completion rate with program changes • NGRNs work rotating roster: Night duty determined by unit NUM • Workload demand can inhibits NGRN study day attendance • Socialization challenges · Handholding [varies] · Preparation and supernumerary inconsistent · Silos - difficult to create cohesion. · Need for exposure and experience
Abbreviations 1 Nurse Educator 2 Director of Nursing/Facility Manager 3 Nurse Manager 4 Clinical Nurse Consultant 5 Nurse Unit Manger 6 Performance Review 7 Clinical Nurse 8 Clinical Facilitator 9 Clinical Coach 10 Clinical Nurse Educator				

Appendix 7: Demographic questionnaire and participant data

1. What is your Gender?	☐ Female	☐ Male
2. What is your age?		
3. What is the general location of your workplace?	☐ Metropolitan ☐ Inner Regional ☐ Outer regional ☐ Rural ☐ Remote ☐ Very remote	
4. What is your profession?	☐ Nursing and Midwifery ☐ Health worker ☐ Medical officer ☐ Allied health professional (please specify): ☐ Administration and management ☐ Human resource personnel ☐ Other (please specify): _____	
5. In what year did you qualify?		
6. How many years of experience in your profession?	Approximately _____ years	
7. What type of education program did you undertake to qualify	☐ Tafe certificate ☐ General nursing certificate ☐ General certificate ☐ Bachelor degree program ☐ Other (please specify): _____	
8. What was the place of your initial registration	☐ Queensland ☐ Other states of Australia (please specify) _____ ☐ United Kingdom ☐ New Zealand ☐ Asia ☐ Europe ☐ United States ☐ Other (please specify) _____	
9. How many years have you worked in your profession	Approximately _____ years	
10. What is your current position and/or designation		
11. How many years have you worked with NGRNs		
12. What is your highest qualification reported	☐ Certificate ☐ Diploma ☐ Bachelors Degree ☐ Graduate Certificate ☐ Graduate Diploma ☐ Masters Degree ☐ Higher Degree by research: Doctoral or PhD ☐ Other (please specify) _____	

Participant Demographic data excluding executive department heads (N=53)

Demographic	Case 1[R]	Case 2 [SOR]	Case 3 [IR]	Case 4 [LOR]	Cross case	
					Number	
Gender						
Female	8	12	13	12	45	**85%**
Male	4	1	1	2	8	15%
Age						
Range	29 - 52	29 - 65	27 - 54	28 - 53	27 - 65	Range
Average years	43.15	48.8 [oldest]	42.3	40 [youngest]	**43.15**	**Average**
Profession						
Nursing	7	10	9	13	**39**	**74%**
Medicine	3	2	1	1	7	13%
Allied health	1	1	2	0	4	7%
Human resources	1	0	2	0	3	6%
Year of qualification						
Range	1978 - 2009	1976 - 2011	1983 - 2009	1982 - 2011	1976 - 2011	Range
Years of experience						
Range	4.5 - 32	05 - 32	4.5 - 32	05 - 32	4.5 - 32	Range
Average years of experience	16.7	25	16.3	16.6	**18.7**	**Average**
Education to qualify				2 pre EN		
TAFE certificate	1	1	0	0	2	1%
General certificate (GC)	2	4	1	1	8	15%
Bachelor (BN)	9	8 [1 GC & BN]	12 [2 dual GC & BN]	13 [1 GC & BN]	42	**79%**
Other	0	0	1 [HR Diploma]	0	1	
Place of initial registration						
Queensland	8	9	5	10	**32**	**60%**
Other states	1 NSW	2 NSW	2 NSW; 1 SA	1 NSW; VIC	6 NSW; 1 SA; 1 VIC	15%
Other countries	1 Nigeria	2 United Kingdom (UK)	1 UK: 1 Asia; 1 USA; SA	1 UK	3 UK; 4 Other;	13%

Participant Demographic data excluding executive department heads (N=53)

Demographic	Case 1[R]	Case 2 [SOR]	Case 3 [IR]	Case 4 [LOR]	Cross case	
					Number	
Position						
Management (clinical)	4	1	0	4	9	17%
Education (clinical)	2	2	4	3	11	20%
Clinical	5	10	8	7	**30**	**57%**
Other [HR]	1	0	2	0	3	6%
Practice setting						
General medical, surgical	2.5	11	8	3	**24.5**	**46%**
Specialty	4	0 (embedded general wards)	4	10	18	34%
Management	5.5	2	2	1	10.5	20%
Years of NGRN experience						
Range	03 - 36	04 - 27	4.5 - 30	03 - 36	03 - 36	Range
Average years	11.5	15	13.6	14.5	**13.7**	**Average**
Highest qualification						
Certificate	0	1	0	0	1	2%
Diploma	0	2	1	0	3	6%
Bachelors degree	3	4	5	5	**17**	**32%**
Graduate certificate	2	1	6	5	14	26%
Graduate diploma	0	2	1	1	4	7%
Masters degree	6	3	1	2	12	23%
Other additional	1 FRACP	EN Meds		1 FRACP	2	4%
Total participants	**12**	**13**	**14**	**14**		

Appendix 8: Framework for assessing qualitative case study research

Relevant for all qualitative research		Section in thesis
1. Is this report easy to read?	· The thesis is designed to move the reader logically and sequentially through the research process. · A consistent structure is used throughout the thesis where each chapter is linked together to create cohesion across the thesis. Related facts are grouped together under headings, in succinct paragraphs. · The thesis has been professionally edited with the aim of ensuring clarity in the content and flow.	Content list All thesis Question 2 Question 8
2. Does it fit together, each sentence contributing to the whole?	· The case descriptions are thick yet structured in the same manner to ensure continuity and consistency in the stories of each case and the finial collective case study findings. · Major categories are structured to maintain a connection between the subcategories and create a coherent explanation of each category. The major categories are aligned to the research aim and questions to maintain methodological congruence in the research. · Storyline contributed to creating cohesion between the major category and their subcategories and between each major category that represent the findings of the collective case. · The findings are discussed within the initial literature that contextualised the study and further evidence that emerged over the duration of this study. The findings lead to the recommendations.	Content list All thesis Question 1 Question 8
3. Does this report have a conceptual structure (i.e., themes or issues)?	· The thesis is logically structured move through the research process. · Issue questions were developed from the initial literature review and established the framework to guide the research design and process and contextualise the case within the macro context in which it evolves. · The research aim and questions were generated from the issue questions. The interview questions stemmed from these and were designed to enable flexibility to explore additional topics as they emerged. This facilitated an inductive approach to the data collection and generation. · Findings are contextualized within the background of the case, then presented in categories and subcategories and discussed in light of the contemporary literature and followed by recommendations. · The aim and research questions are revisited in the concluding chapter to establish methodological congruence and findings address the initial aim and research questions.	Chapter 1 Chapter 2 Chapter 3 Chapter 11
4. Are its issues developed in a serious and scholarly way?	· Issues are derived from a logical, thorough review of literature related to the contents and topic of interest. · As above - the research aim, questions and design were generated from the issue questions.	Chapter 2
5. Have quotations been used effectively?	· Numerous quotes are used through the reporting of the research findings to validate interpretations, emphasise specific details, and create a vicarious experience that cultivates resonance for the reader. · This is explained further in chapter (11) where the quality and rigour of the research is discussed.	Chapter 5-9 Chapter 11
6. Has the writer made sound assertions, neither over or under interpreting?	· Interpretations are based on data collected and analyzed: interview, documents, field notes, memos, and questionnaire. Use of grounded theory methods of analysis and triangulation of sources and methods aimed to ensure the interpretation is representative of the cases. · Memoing helped to monitor my influence and maintain focus on what the data was saying. · Review with the supervisory team: useful – particularly in questioning my findings, assertions, and interpretations. This, with my memos, identified instances where I had influenced the data interpretation and both over and under interpreted the data. Coupled with the use of interim case summaries and storyline, these techniques helped to refine and report the interpretations based on the evidence and aligned to the aim and research questions. · Participant quotes support findings and case data from documents are used to verify data collected and generated about the context of the cases. · Findings have been discussed in the context of the broader literature.	Chapter 4 Chapter 5-9 Chapter 10
7. Are headings, figures, artifacts, and appendices, indexes effectively used?	· Headings have been used to frame and cultivate a coherent, logical sequence in the content to guide the reader logically through the content and steps of the study. · Figures are designed to both explain and provide visual clarity on the research process and findings. · Appendices provide additional supportive content for the research processes and findings. This enhances the transparency of the research process, adding to the credibility of the findings.	Forward Thesis Appendices
8. Was it edited well, then again with a last minute polish?	· The thesis has been professionally edited to ensure the research presented is of high quality. This acknowledges the value of the research, respects the contribution of the participants, the support of the university and the importance of conveying the findings clearly for use in the wider context. · Self-editing, supervisor review and feedback have ben consistent during and on completion of the thesis.	Front pages All thesis
9. Were sufficient raw data presented?	· Raw data has been used throughout the findings to support, emphasise, illustrate, and clarify findings. Sufficiency of data was validated through discussion with supervisors and in consultation with relevant expert literature and similar scholarly work.	Chapter 5-9
10. Is the nature of the intended audience apparent?	· Audience identified in the introduction of the study, which identifies who would benefit from research. · Recommendations identify the specific groups for whom the recommendations have relevance.	Chapter 1 Chapter 11
11. Does it appear that individuals were put at risk?	· Ethical considerations were followed throughout the research process: Written and verbal consent, ethics and research governance approvals and maintenance of password protected and de-identified databanks. · All data was maintained and stored according to NHMRC and JCU policy and procedures. · A risk management plan was developed with contingency strategies, prior to commencing the research.	Chapter 3 Chapter 4 Appendix 3 and 4

High relevance to qualitative case study research		Section in thesis
12. Is the case adequately defined?	· The case is defined early in the research design and maintained in the reporting process. · Contextual boundaries are identified and described. These are limited to specific healthcare provider sites in specific geographic regions and specific healthcare professionals groups. · Case descriptions provide detail of the physical and institutional context to clarify the system in which the phenomena are studied. · Examples of the researcher's memos and field notes of each site are provided as a way for the reader to have a " vicarious experience" of the context and the case being studied. Additional information about the organizational, economic, political, and regulatory context of the cases is provided along with the tangible, geographical and community context specific to each case.	Chapter 1 Chapter 3 Chapter 4 Chapter 5
13. Is there a sense of story to the presentation?	· The case descriptions and findings are presented to give a "sense of story" and maintain cohesion between the context of the cases and the findings. As outlined in question 1, the subcategories are presented to flow cohesively as a logical story of the findings. · Use of participant quotes aims to engage the reader with the participants and the story. Again, the use of storyline was used to create a cohesive flow in the findings. Thee findings are then brought together in light of the current literature about the topic. This creates a sound context and logical story that connects back to the origins of the study. · Recommendations are presented as the conclusion to the story.	Thesis Chapter 5-9 Chapter 11 Question 1
14. Is the reader provided some vicarious experience?	· Thick descriptions are provided and illustrative quotes are used to augment the content and convey the participants' perspective. · Memos, raw data, case descriptions help cultivate a view of the case through the participants' lens. · Use of field notes and memos related to the context helps create visual clarity about the context and participant quotes connect the reader with the participants. · Together with thick descriptions, these aim to provide a vicarious experience and resonance for the reader to aid the transferability of findings if warranted.	Chapter 5-9
15. Has adequate attention been paid to various contexts?	· The initial literature review establishes the macro context of the phenomena and establishes the relevance and influence to the broader areas of the nursing profession, education, regulation and policy · The context for the case study is outlined in the research design that clarifies the boundaries as per the case and participant selection and inclusion criteria. · Case descriptions are lengthy and detailed to contextualize the findings within background and setting for which they occur. The aim is to deepen one's understanding of the findings and again help support analytic generalizations for the reader, hence transferability of the findings. · Throughout the findings, contextual differences are highlighted to explicate the role and relevance of context in the findings.	Chapter 2-4 Chapter 5-9
16. Were data sources well chosen and in sufficient number?	· Data sources were carefully considered at the outset of the research. A thorough review of the literature and case study methodology and, recommendations from Stake (2006) and other established case study researchers, guided the choice of data sources. · The rationale for case and participant section is outlined. Case and participant selection was purposive to align with the aim of the research and to ensure a broad, diverse cross-section of data about the case was generated for an in-depth comprehensive view of the case. Snowball sampling was used with participants only and proved useful in recruiting participant groups that were not as easily accessed. · Access to cases was considered and organized.	Chapter 1 Chapter 2 Chapter 3 Chapter 4
17. Do observations and interpretations appear to have been triangulated?	· Triangulation of data sources and methods is integral to the research design. This is discussed in chapter 3 and 4. The use of grounded theory methods of analysis where constant comparative analysis is employed throughout the data collection and analysis enhanced this process. Observations were not used as a formal method of data collection. General observations of the context captured in field notes were used and triangulated as a source of data.	Chapter 3 Chapter 4
18. Is the role and point of view of the researcher nicely apparent?	· The prologue provides insight into my background and my position in the research is disclosed in chapter 1. These make transparent my role in the research and enable the reader to make his or her own decisions about my potential influence in the research. · Memos highlighting the researchers perspective have been included in the content of the thesis. This aims to clarify the researchers perspective, relationship, and influence on to the research process. · The position of the researcher was constantly examined with the use of memos and supervisor review and discussion throughout the research process. · The findings and discussion present the researchers interpretations and conclusions about the data.	Prologue; epilogue Chapter 1, Chapter 5-9 Chapter 11
19. Is empathy shown for all sides?	· An attempt has been made to present all perspectives: the perspective of each case, the participants, and the researcher. Further, the background and discussion chapters present the view of the current evidence to demonstrate how all perspectives were carefully considered. This provides for a comprehensive understanding of the topic. · As stated in question (6) review, feedback, and discussion with my supervisory team helped ensure a balanced perspective was taken.	Chapter 1 Chapter 5-9 Chapter 10
20. Are personal intentions examined?	· The impetus and purpose for this research are described to make transparent and clarify my personal intentions, and potential influence in the research. · Reflexivity was maintained throughout the research through memoing, field notes, and active discussion with my supervisory team. · I memoed ideas, thoughts, feelings and decisions about emerging concepts and process, the context, participants, and their responses. Challenging assumptions involved comparing my view with the participant's views, discussion with my supervisors and clarifying codes and categories that evolved as the research progressed.	Prologue; epilogue Chapter 1 Chapter 4 Chapter 5

Added from Merriam (2009)		**Section in thesis**
21. Is the case study particular	· Focused on a particular phenomenon · Longstanding history- prevalent in nursing literature and for the nursing profession. · Related to registered nurses entry to the workforce, education for their field of practice	Chapter 2 Chapter 3
22. Is the case study descriptive?	· The case study is exploratory, yet includes rich, thick description of the topic being explored. As per question 2, 5, 9 & 13 – 15, the structure and descriptions are aimed at ensuring reader resonance, engagement, and a vicarious experience of the cases.	Chapter 5-9
23. Is the case study heuristic?	· As per question 6 and 22 · The aim of this study is to increase the reader's understanding of the phenomenon being explored.	Chapter 5-9; 10
Added from Creswell (2013)		
24. Was study design appropriate to methodology?	· A thorough review of case study methodology was undertaken to guide the research design and published as a journal article (chapter 3) · Recommendations from Stake (2006) and other established case study researchers were considered · The rationale for the choice of case study and case study design is detailed early in the report to establish methodological congruence (Mills & Birks, 2014) and alignment between the purpose and methodology · The justification for the study design includes rationales for the research paradigm, theoretical framework, methodological orientation and selection of methods	Chapter 1 Chapter 3 Question 16
Added from Birks and Mills (2015, p. 148)		
25. Has the researcher indicated the mechanisms by which an audit trail was maintained	· A detailed description is provided in the methodology and methods chapters. These details indicate how and where the data is stored and managed, collected, analyzed and interpreted. · Data collection and analysis for each case is documented and was meticulously planned and implemented in the same manner across each case. · All data was documented, stored, and utilized in the manner. · Templates were created to ensure continuity and consistency of note taking including the methods used during interviews. · Field notes and memos were used throughout the research process as part of the dataset to document ideas, thoughts, and decisions made throughout the research. Excerpts have been included in findings chapters	Chapter 4 Chapter 5
26. Are procedures described for the management of data and resources	· As above - all procedures for data management and storage are described in chapter 3 and align with ethical standards and NHMRC and JCU policies for ethical conduct of research also discussed in chapter 3.	Chapter 3

Adapted from:

Hyett, N., Kenny, A., & Dickson-Swift, V. (2014). Methodology or method? A critical review of qualitative case study reports. *International journal of qualitative studies on health and well-being, 9*(23606), 1-12. doi:http://dx.doi.org/10.3402/qhw.v9.23606